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THE MIGRANT PROJECT


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PALM BEACH COUNTY
Belle Glade

MIGRANT PROJECT 1959

ABSTRACTED FROM

A report of the observations and activities of a public health team working directly with Agricultural Migrant Laborers in Palm Beach County, Florida.

Although this issue of Health Notes presents a report of Migrant Project activities in Palm Beach County, it should be noted that considerable migrant work is being done elsewhere in Florida. Some twenty-five county health departments in the state are currently engaged in medical, nursing, sanitation and other public health activities which concern migrant workers and their families.

Migrant housing activities have been greatly accelerated since the passage of the Migrant Labor Camp Act by the 1959 Florida Legislature. This Act, along with revised State Board of Health camp regulations, provides the necessary legal foundation for our sanitation program in migrant labor camps. Progress is now being made in this important area and continuing activities promise to effect considerable improvement in migrant housing facilities throughout Florida.

Many other agencies, besides those interested in health, are concerned with migrants. Welfare, educational, religious, governmental agencies — these and many others, concern themselves with Florida's total population — of which the migrants are a part.

FLORIDA HEALTH NOTES

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Each fall approximately 85,000 migratory agricultural workers come into Florida seeking employment in the vast vegetable and citrus areas. In 26 of Florida's 67 counties, migratory farm labor is used to some extent. Into one single county – Palm Beach –come more than one-fifth of the 85,000 migrant farm workers.

Palm Beach County contains 2,700 square miles of land and water – an area larger than some entire states. To this area each autumn come approximately 20,000 migrant farm workers seeeking employment in the vast vegetable farming industry which gives the area a distinctive title –"The Winter Vegetable Capital of the World." There has long been concern over these "stateless" hordes who follow the East Coast "stream," though many of them claim Florida as their home and begin their journey northward each year around May or June.

In 1954, the Bureau of Maternal and Child Health of the Florida State Board of Health conducted some special activities in the field of migrant health. The U. S. Department of Health, Education and Welfare (specifically the Childrens Bureau) underwrote part of the cost of the study activities. One of the outgrowths of the 1954 project was the establishment of the present five-year Migrant Project begun in 1956. For the past several years, a staff of public health workers have been working directly with approximately 6,000 agricultural migrant laborers in the Belle Glade area of Palm Beach County. To describe the activities and observations of this staff is the purpose of this issue of *Health Notes.*

Migrants' Background

A popular misconception about the migrant is where he comes from. The Atlantic Coast migrant stream is composed primarily of Negroes from the Southeastern United States–not foreigners who speak a different language. More Atlantic Coast migrants are born in Georgia than in any other state. A smaller number of migrants come from Puerto Rico and from Mexico – via Texas.

They can best be described as former Southern Negro "sharecroppers." It is this group, with its cultural, social, and moral codes, that is the reservoir of Atlantic Coast migrant farm workers.

The most frequently asked questions are, "Why do they (the migrants) go into the stream?" "Why don't they do some other kind of work?" The migrant's occupational background is rural agriculture; agricultural mechanization tends to force him off the land. Since agricultural labor is all that he knows, it is to this that he turns for a livelihood.

Though there are many exceptions to the pattern, the mi-

This is the Okeechobee Project. A housing authority group of dwellings that cares for many migrant laborers in this area during the winter vegetable season.

grant family is thought of in terms of a mother and her children. In many instances, a father or father-figure is not present in the household.

Educationally, the level is low. Some have never attended school, some have had "a little schooling" but remain essentially illiterate. There are those who have completed four, five, six, seven grades, and a very small number have high school diplomas.

From the farmlands of the deep South comes the migrant —limited in education, restricted in opportunity—to whatever the future may hold.

Migrant Project

In view of the problems connected with the seasonal influx of migrants, it was decided to do a study lasting five years from which conclusions might be drawn. It is expected that it will demonstrate that a number of specialists in various phases of public health work, working together as a team, can provide better service and be more effective than previously used methods.

The Florida State Board of Health was given money for the project by the Children's Bureau and a project staff was assigned to the Palm Beach County

Health Department for administrative purposes.

With a staff comprised of a medical social worker, a public health educator, a nutritionist, two public health nurses, a secretary, and a liaison worker (Negro) who provides communication between the staff and the migrants, the project was put into operation. They are assisted by a pediatrician and a "generalist" (physician) who serve as medical consultants in the clinics and a sanitarian whose job consisted of checking housing conditions in the western part of the county.

The project activities were confined to two specific areas of the county: one in the city of Belle Glade and the other in a labor camp known as Okeechobee Project. The area houses about 6,000 people.

Mobility of the Migrant

The peculiar work pattern of the migrant — so very different from that of most workers — is

The Belle Glade loading zone serves as an informal outdoor hiring hall for day laborers. Here the trucks pick up migrants each morning.

The rich bean fields of the Lake Okeechobee area offer employment to large numbers of migrants. Stoop labor must still be used for this type of crop.

what sets him apart. He moves up along the Atlantic seaboard, following the crops in various states as they need his services. He works in two ways: perhaps as a member of a crew which is headed by a foreman who arranges transportation and also contracts with farmers in advance for work for his crew. Others following the "freewheeling" method. They move along with the crops either alone or in company with a few others and find work as best they can.

Surveys indicate that the average organized crew will work at 2½ stops, or work sites (per crew) along the Atlantic coast. By contrast, the freewheelers have less guarantee of work and often must work at more jobs.

Some crews comprise as many as a hundred people while others consist of only a few families. The total number of workers and families in the Atlantic Coast Stream has been estimated at approximately 50,000.

When the crews return to Belle Glade in October and November of each year, they break up and do not work as crews. They work independently on a day-by-day basis. This is called "day-haul" labor and it is possi-

ble that the same migrant will be employed by a different grower each day of the week, including Sunday.

It is obvious that the Atlantic Coast pattern of migration is characterized by much more organization and planning than one would suspect. The "wanderlust" or "itchy feet" description of the Atlantic Coast migrant appears to be the exception rather than the rule.

Health Problems

Migrants have the usual number of health problems, plus a few that are exaggerated by their way of life. This means they need medical and welfare assistance at times, no matter in which state they might happen to be working. In Florida they are eligible for health department services on the same basis as residents. Part of hospitalization costs are paid by the Hospital for the Indigent Program, which is administered by the State Board of Health.

Some unusual problems are created since they are in Florida only six to eight months of the year yet there is no provision for this health service in the budgets of the counties where they are primarily employed. In Palm Beach County alone this represents an increase of 20,000 people, with their proportionate share of problems, many of whom require services of one kind or another.

Migrants often do not know where to find help. Because of the day to day nature of their jobs, for example (they cannot work when it rains), their financial situation is often precarious. Some welfare assistance can be given under certain circumstances but it is usually difficult for them to establish credit or make financial arrangements for hospital and medical services.

Because of their moving about it is difficult for the proper follow-up to be given by doctors and public health workers.

These problems are being overcome slowly. For instance: local governments are assuming a larger share of the financial burden for care of migrants. State funds have been appropriated to supplement the local funds.

Migrants are on a comparatively low cash income basis but some of them can be taught to budget their funds for better management. Some have insurance which may provide a part of the hospital costs with proper assistance from someone who understands insurance matters.

Efforts are being made to try to improve the follow-up when migrants go on the road. They are being encouraged to carry personal health records. Some health departments in other states, as well as some hospitals and doctors, are being advised by mail of migrants who may visit them as they go up the stream.

More attention is being given, in Florida, in teaching the migrants to prevent illness and to follow up on needed medical treatment.

Special Services

In order to develop special techniques and methods of treating the problems of the migrants the Migrant Project staff devised several programs. One of these is the Family Clinic.

Once a week entire families are invited to attend the clinics. A pediatrician and a general practicioner serve as medical consultants. The only specific requirement is that no major health problem exists in the family. Prior to the clinic the public health nurse, the nutritionist and the health educator have had an opportunity to obtain a family history. More information is collected at the clinic.

At first all members of the family were examined in one evening but it was found better to examine the adults one evening and the children the next. A complete physical check-up, including a chest x-ray (adults only) as well as laboratory tests such as urinalysis, stool examinations, serologic tests for syphillis, and others is done. The staff confers on the follow-up necessary on each case. In this way data are gathered and placed in the records. Although supposedly well people come to the clinic, latent or unsuspected minor illnesses have been found and successfully corrected.

Surveys for dental defects and for nutritional deficiency, as related to eating habits, are being carried out.

Obstetrical care is one of the most difficult problems faced by migrants. A low cost maternity plan has made possible the elimination of midwives from western Palm Beach County, replacing them with obstetrical care provided by physicians in a hospital. For a year mothers were interviewed immediately after delivery and again six weeks later. The information obtained is being studied with a view to improving the program.

There exists a need for better transmission of information (on migrants' health conditions) from one state to another and the public health workers are seeking to solve this problem of communication. Migrants need follow-up on their health problems from state to state and from job to job. Health workers want to know what happened to the migrant before he arrived and wish he would carry information with him as to what was done in his last place of residence. Although various types of health records have been proposed the study indicates that migrants will not carry any sort of bulky or cumbersome combination of records. At the present time a billfold-size card, develop-

A migrant mother and her children face the camera with some misgivings. Note the china lamp in the rear which probably has traveled thousands of miles along with this migrant mother.

ed for use in Delaware, Maryland and Virginia has been modified slightly for use in Florida and is being tested. About 7,000 cards were distributed in Palm Beach County during the 1958-59 season.

General Health

The statement has been made frequently that the health of the migrant is poor, that they have much communicable disease which they carry with them from one area to another, and that they have an incidence of defects which is abnormally high when compared to less mobile members of the same socio-economic group. Observations up to this point indicate that there are reasons to doubt the truthfulness of this statement.

Migrants vary widely in their ability to grasp the meaning of health information, adherence to personal health habits, and in their willingness to obtain needed medical attention.

The pediatric consultant reports that the general health status for the children is better than would be expected for the group. He attributes this to the fact that among migrants there is high fetal loss (miscarriages), high death rate among babies less than a year old. Together with the deaths among young children from illness or defects (which might have been prevented or corrected), this eliminates the weaker children early in life and therefore the ones reaching the clinical examination state are those which have managed to become a part of "survival of the fittest" group.

Dental troubles are quite common among both children and adults. Among the adults 95 to 100 per cent examined in the clinics had either cavities, broken or worn teeth, diseases of the gums and/or abscesses. Approximately 75 per cent of the children also had dental defects.

The children show a high incidence of skin conditions. This is due largely to accidental cuts and bruises which, with poor personal hygiene (lack of bathing) produces frequent infections. Many children have enlarged tonsils and a copious discharge from the nose, which the parents seem to disregard.

Anemia, chiefly of the nutritional types, is seen mostly among the children. This type of anemia responds well to iron, given by mouth.

Most of the children are affected at one time or another with intestinal parasites (worms), chiefly ascaris (stomach worms) and pinworms.

Probably the most common cause of death among infants after the first month of life is diarrhea. Epidemics occur between December and February and often involve the entire family. Severe dehydration is common and death may result, especially among the younger children. A milder form of diarrhea occurs in late summer but responds well to simple dietary procedures.

Other problems discovered among the children, such as orthopedic defects, congenital heart conditions, sight and hearing defects have been difficult to correct or improve because of difficulty in maintaining contact with the families.

The Family Clinics also uncovered some disease conditions among apparently well individuals. Among them were high blood pressure, heart disease, diabetes, uterine cancer and abdominal tumors. However, there were very few cases of vitamin deficiency and malnutrition among this group.

Although there are many factors in the migrant's way of life which are thought to produce or aggravate emotional disturbances, mental illness has not been found to any large degree among persons examined.

Public Health Nursing

A fundamental in the professional training of a public health nurse is the ability to be accepted by those she serves—accepted on a basis of trust and confidence. Without this acceptance she cannot successfully conduct interviews in the migrant's home or at the clinic.

Public health nursing objectives are difficult to attain, because the migrant moves about a lot and also lives, at times, in almost inaccessible places. The control of communicable disease is difficult because of the crowded living conditions and the frequent moves. Immunizations are sometimes given in three separate health departments in three different states.

While much progress has been made in establishing communication with the migrant, there are still problems. Some of them are: Absence of the mother from home during the daytime, making it difficult to have conferences with her about health prob-

These migrant children are shown sitting on the steps of a dwelling in the Okeechobee Project. It is not at all improbable that the older girl in the rear cares for these children while their mothers work.

lems; lack of interest in *early* medical supervision, in maternity, communicable, and chronic disease cases; insufficient low cost day care centers for children; better means of transporting patients to clinics and hospitals.

Medical Social Work

Primarily, the medical social worker is concerned with mothers and children. The attitudes of mother toward child and mother's concept of adequate motherhood are something the worker must take into consideration in all her endeavors to help them. The migrant family is, for the most part, a strong matriarchy (where the woman is the dominant member of the family), and through the years a very set pattern of behavior has been formed.

About 40 per cent of the women seen in the maternity clinic are unmarried. One of these four will usually marry later following the birth of her child. This is due to the fact that the man generally considered to be the child's father wants to be certain that the child is his. Many girls under 20 expecting their first child are not ready for motherhood. The tendency is to let her own mother (the grandmother) absorb this first child into her own family.

The farm laborer's wife who already has a large family is the most resistant to marriage. The year 1948 was remembered by one of these women as a red-letter year — the year she did not have a baby.

The worker uses as a guide the mother's ambition for the children. Most of the migrant mothers want their children to get all the education they can absorb. Very few of the mothers are inclined to exploit their children, such as keeping them out of school to work and taking their pay for the family. There is, however, a tendency to use eight and nine year olds as baby sitters while the parents work in the fields.

The migrant will usually cooperate in matters that, to him, seem important. He weighs each suggestion made by a member of the team and perhaps comes to the clinic. He accepts the information that seems important to him—in his circle. The more the

Why must there be migrant agricultural workers? Because although we have come a long way towards planting crops by machines we still need human beings to do much of the harvesting. This is often known to the migrant as "stoop labor." Therefore, the migrant is still extremely essential in certain areas of Florida—as well as in other parts of the nation.

Typical migrant housing in Belle Glade is shown here. Good private housing is often hard to find.

man is involved in planning for the family and in counselling regarding marital problems, the more interested he has become.

When community agencies work together, it has been possible to work with the migrants toward what they want. For example:

A 52 year old woman has been referred to Vocational Rehabilitation Service for an old unrepaired hernia (rupture). She has no income and is unable to work. Surgery has been recommended but she must first be built up physically. She receives a food allowance from the County Welfare Agency but also has special dietary needs. The nutritionist helps her plan an adequate diet. The local Migrant Committee supplements her Welfare Agency income and also pays her rent.

As to maternity care, a plan which would allow the patients to be delivered in a hospital for a price they could afford was

needed. It was felt important that the doctor who gives care and examination during the months of pregnancy should also be the doctor who delivered the baby. Therefore, the doctors and the County Health Department proposed and worked out a plan which would provide that the patients who qualified under the plan would receive prenatal care in the doctor's office and then be delivered in the hospital by the same doctor for a fee of $50.00. The hospital stay was to be for not more than 48 hours and the hospital would charge only $25.-00 for this period. Later, however, this was raised to $30.00.

To determine eligibility for this type of care, the social worker screens the patients and gives the hospital and the physician copies of her reports. It is important that the records all be carefully assembled and made ready to send with the pregnant woman if she decides to go "up the road" before time for her delivery.

This plan has had some side benefits. For instance, a number of patients who formerly received care under the low-cost plan are now going to doctors for private care, paying the regular fee and not coming to the clinic at all. A thorough analysis as to the reasons they are doing so has not yet been made but apparently patients have liked the experience of private care and are ready for the next step—that of making their own arrangements for care.

On the other hand, some patients come to the prenatal clinic who say that they are not coming to the Health Department to be referred for the low-cost plan. They just want the *additional* services offered by the clinic. One patient expressed it this way. "I had my first children when I was young. For ten years I didn't have any. When, at the age of 32 I found that I was in 'the family way' I was scared to death. The nurse looked right after me, and I had an easier time than I had with the first ones. That's why I always want to come to the clinic *before* I go to the doctor. It isn't *the money.*" Others come because of the Family Clinic, because of "The doctor who tells you about keeping from getting sick," "the lady who tells you about what to eat," and "I just wanted to talk with the social worker."

The consideration being given to the operation of a general assistance program by the State Department of Public Welfare in the event of an emergency is encouraging. Though "emergency" is not clearly defined, the program would presumably be put into effect in the event of another "freeze" such as occurred during the winter of 1957-58. A general assistance program is now operated by the County Welfare Department.

Typical migrant housing in Belle Glade often consists of ramshackle frame buildings that show passage of years and migrant tenants.

Sanitation

Housing for migrants has been a problem for many years. Cooperation on the part of some of the owners has resulted in improved conditions in some areas.

During the summer months, while the migrants are "up the road" most of the housing operators, called "suppliers," clean, paint, and patch the housing intended for use the next season. The individual houses are of various kinds and in various states of repair.

There are some migrants who, because of illness, age or pregnancy do not go north with the rest of the crews when the summer begins. They remain in the area until the summer has passed and other migrants return from up the road. Usually they pay a reduced rental rate. Some of the families intending to return in the fall may pay rent in advance before they leave to insure that they will have a place to live when they return. Others will send a small token rental all during the summer which reserves a house for them. Many families have been coming back to the same house and the same grower for a number of years and have

established themselves as desirable tenants. In such cases, the landlord will keep their place for them until they return—without rental or advance payments.

When the crews return in the fall and break up, each individual or family goes seeking his own shelter and places that sometimes are not intended for occupancy wind up with large groups living in them. Others build lean-tos along the banks of canals or in remote cane brakes.

Because of social, racial, political and economic factors, separate housing is reserved for American white, Negro, Puerto Rican, Texas-Mexican and special skilled labor. For instance, the Puerto Ricans always seem to rent the same buildings which have been occupied by Puerto Ricans in previous years.

"Offshore" laborers (in Florida they are usually from the Bahamas), are those males who are brought into the area under contract with a foreign government. These men are housed in dormitories, usually four to the room. Central toilet, bath and laundry facilities are provided in specified ratio to the number of beds. The barracks are large rooms with about twenty or more double-deck bunks.

Most of the housing units, except those for the offshore laborers, are unfurnished. Some have one bedstead.

Rooming houses are generally so arranged that a tenant can rent either one single room or two adjoining rooms. The amount of rent is the same per room whether one or two are taken. Average rentals are from $5.00 to $10.00 per room per week. Characteristics common to most of the migrant quarters are central toilets, bath and garbage storage facilities. Usually, one water spigot is available on each floor of the rooming houses and an average of one spigot to four of the individual houses in a

This present issue of Florida Health Notes is a "free" abstract of a longer report which bears the same title "Migrant Project—1959." Those persons who have a special interest in migrants and their problems may obtain a copy of the more technical description of this project up to the present time by writing to:

Division of Health Information
Florida State Board of Health
Post Office Box 210
Jacksonville 1, Florida

camp arrangement. Each room has one ceiling light and generally one double electrical wall outlet. 110 volt is the maximum current capacity of any of these outlets.

"Bottled gas" is available to individuals who will pay the installation fee and put up a deposit for the tank or tanks. This service is rarely used by the migrants. The landlords generally prohibit the use of the 110 volt hot plates for cooking where the electricity is not metered to the individual household.

More than one window per room is rarely observed. A few tables, chairs, and galvanized iron wash tubs are left in the camps the year round for the convenience of the tenants. These are used on a first come, first served basis. To furnish their dwelling unit, the migrant family usually adds a small table, a two or three burner kerosene cook stove for cooking and heating, a mattress for the bed, a chamber pot, a box nailed to the wall for food and spice storage and a broom handle nailed across a corner of one of the rooms on which to hang clothing. The trunks and foot-lockers used by the migrants in their travels are stored under the bed or are placed against the wall where they serve as benches.

New privately financed migrant housing under construction in Belle Glade offers concrete block stability and ease of cleanliness. Note cafeteria on first floor on left. It was only open for a short while and closed due to a lack of trade.

A number of migrants make a living selling sandwiches and soft drinks in the fields. They build fires to heat frankfurters and fry fish whenever the harvesters check in their "pickings." Sanitary food handling or food service technique are hardly a consideration in most of these operations. Other harvesting crews who do not have this service rely on the truck drivers to bring back lunch orders from the "coffee shop" at the packing plants. Pre-packaged products such as cookies, crackers, candy, "cracklings" and fresh fruits are frequently sold in the fields. The use of soft drinks restricts the consumption of questionable water transported to the fields in various types of containers.

Many times, fields cannot be harvested because of human waste deposited there by an earlier crew picking in the area or camped nearby. It has been reported that the migrants themselves have refused to harvest these fields. The care of children brought to the fields present problems; dust in dry fields is another. Insecticide exposure is under fairly adequate control based on present knowledge.

It is a paradox that dwelling units more completely equipped than minimum regulations require are often among the last to be occupied. It appears that the amount of rent charged is one of the criteria used by most migrant families, but it is not the only consideration. Often one observes families living in overcrowded and poorly equipped housing units, paying higher rent while better equipped, less expensive housing is available. This can be observed in the summer when high quality housing in relation to minimum code and regulatory standards is closed for lack of tenants while inferior quarters stay rented.

Several examples of superstition having an influence on the choice of housing have been observed. Two migrant women were killed in an auto accident only a few miles from their home. They had lived in a well equipped apartment unit in one of the better maintained buildings in the town. This apartment could not be rented for the remainder of the season although the owner showed it to a dozen or more families seeking housing.

Natural deterioration, fires and condemnation by various agencies remove a number of housing units from use each season.

Nutrition

Some migrant families have enough cooking equipment and space to prepare good nutritious meals, but lack the time needed. Some of them do not have the necessary kitchen equipment and facilities, and their pattern of eating is a result of this lack.

The working adults eat something before going to work, maybe a piece of fried fish, leftover food from day before, or grits with butter, and the children sometimes have dry cereal with a little milk, or the same food as the adults. Those working in the field may have a sandwich (fish or meat) or a "hot dog" and a soft drink for lunch. Others buy large cookies and eat them with a soft drink. The foods cooked at night vary according to what they have on hand and what they have purchased or received free from the field. Some of those families cook chicken, fish, or other meat, cornbread, white potatoes, cabbage or collards, or other kind of greens for the late afternoon or night meals. Some of the families rarely cook, and if they do, they cook greens and potatoes for a meal, or neckbones and rice, or perhaps black-eyed peas. Some of the migrant families have cooking facilities such as a bottled gas stove with an oven, a refrigerator, coffee pots, and other cooking gadgets while others have only a two burner kerosene stove and a few pots and pans.

Babies are fed evaporated milk formulas which are prepared by the mothers or other adults taking care of them, using the same bottle over and over again and using leftover milk kept in the refrigerator for future feedings. Some of the babies are fed baby foods and cereals at an early age (according to doctor's recommendations and the family's pocketbook), and others are kept for a whole year on milk only. Still others get "pot liquor" (liquid from green vegetables) and food from the table beginning at six to eight months. Some of the women breastfeed their babies but bottle feeding is practiced widely and in combination with breastfeeding.

In the Family Clinics, babies and children sometimes have been found suffering from malnutrition or nutritional deficiencies such as scurvy, rickets, kwashiorkor, skin eruptions denoting deficiency of Vitamin A, and B complex deficiencies shown by poor appetite, nervousness and irritability. Many of these children are kept by older women while their mothers work. Other children may go to a nursery and still others just stay around the house supervised by other adults or by children who are little more than babies themselves. Example: A five year old child giving a bottle to the baby of the family. Intestinal parasites are another problem which also affects their nutrition, many times being complicated by frequent diarrhea.

Some of these families also have small gardens near their homes where they grow what they call greens, being primarily collards, turnips, mustards, and okra. Another source of vegetables is the fields where these

families work, bringing home boxes or baskets of corn, tomatoes, cabbage, beans and celery. However, fruits, either fresh or dried, are not often eaten and little milk is purchased except for small amounts for the children.

Health Education

The two major migrant groups with which the staff has worked in health education are (1) crewleaders and (2) mothers. Primarily, the objective of group education was to determine the feasibility of such an undertaking with adult migrants. Here are some of the questions to which answers are sought:

Is the adult migrant educable?
How does the migrant respond to group education?
What factors are important in organizing groups of migrants for educational purposes?
What appear to be health interests of migrants?
What are the health concepts and understanding of migrants?
Where are channels of communications to migrants?

The staff did not have a "set of instructions to carry out," but rather had a set of questions to be answered.

It is felt that the crewleader is an important avenue of communication to the migrant. He is a person upon whom the migrant is extremely dependent particularly while the crew is "up the road." As one crewleader said, "They comes to me for everything." It is the crewleader who makes arrangements for travel, food and shelter while the crew travels from Florida to other coastal states. It may become necessary for the crewleader to advance money "which we mos' never gets back." Apparently, it is not uncommon for the indebted migrant to "jump crews"—abandon the crewleader to whom he is indebted and join another to whom he does not owe anything.

A Mothers' Club was organized for the first year; meetings were held at the health center. Again, the discussion topics were selected by the group members. Nutrition ranked high in selection. The length of the meetings was determined by the group members; two and one-half hour meetings were not uncommon.

It was found that direct mail has a significance to migrants. Even though many of the women would not be able to read other than the simplest material, it was found that the "letter from the clinic,"—a weekly newsletter entitled "Clubnotes"—held particular significance among the migrant women.

The health educator found several interesting facets to his work that are not along the usual lines. For instance, diarrhea and worms are accepted as normal by migrants although they indicate

sickness to the public health worker. Since ascaris, pinworms, and hookworm are seen quite often among migrant children, the parents look on these conditions as something to be expected, rather than illnesses which should be corrected. Insects, such as houseflies, are regarded as pests rather than carriers of disease.

Although some migrants have never been to school it has been established that most have completed about the fourth or fifth grade. For this reason the migrant reading level is very low and educational material on health such as posters, leaflets and pamphlets which are available nationally are of relatively little value unless rewritten for the migrant.

The migrant is a "groupless" person, often not belonging to any community organizations. For this reason he is not easily reached in the "captive audience" type of project. Fewer than 10 per cent of the migrants attend church. Few of them seem to join PTA's or other groups. Thus the problem of mass education of the migrant is one of *defining* rather than *utilizing* channels of communication.

Summary

In every phase of public health activity with the migrant group in Belle Glade the project staff has observed that the problems of the migrant are about the same as the problems of the socio-economic group from which the migrants come. But these problems are intensified and complicated by the wandering life he leads.

We do know that public health activities can be carried on successfully with migrants. Generalizations such as "you can't do anything with *those* people," "they don't want to learn anything," "they're happy the way they are and don't want any better"—all of these and more have been disproven to the satisfaction of the staff. For to work successfully with migrants it is only necessary to remember that the migrant, not unlike other human beings, responds to sincere recognition of human worth, common courtesy and human kindness.

FLORIDA STATE BOARD OF HEALTH

1217 Pearl Street or P. O. Box 210
JACKSONVILLE, FLORIDA

All Counties in Florida have organized county health departments, except St. Johns County

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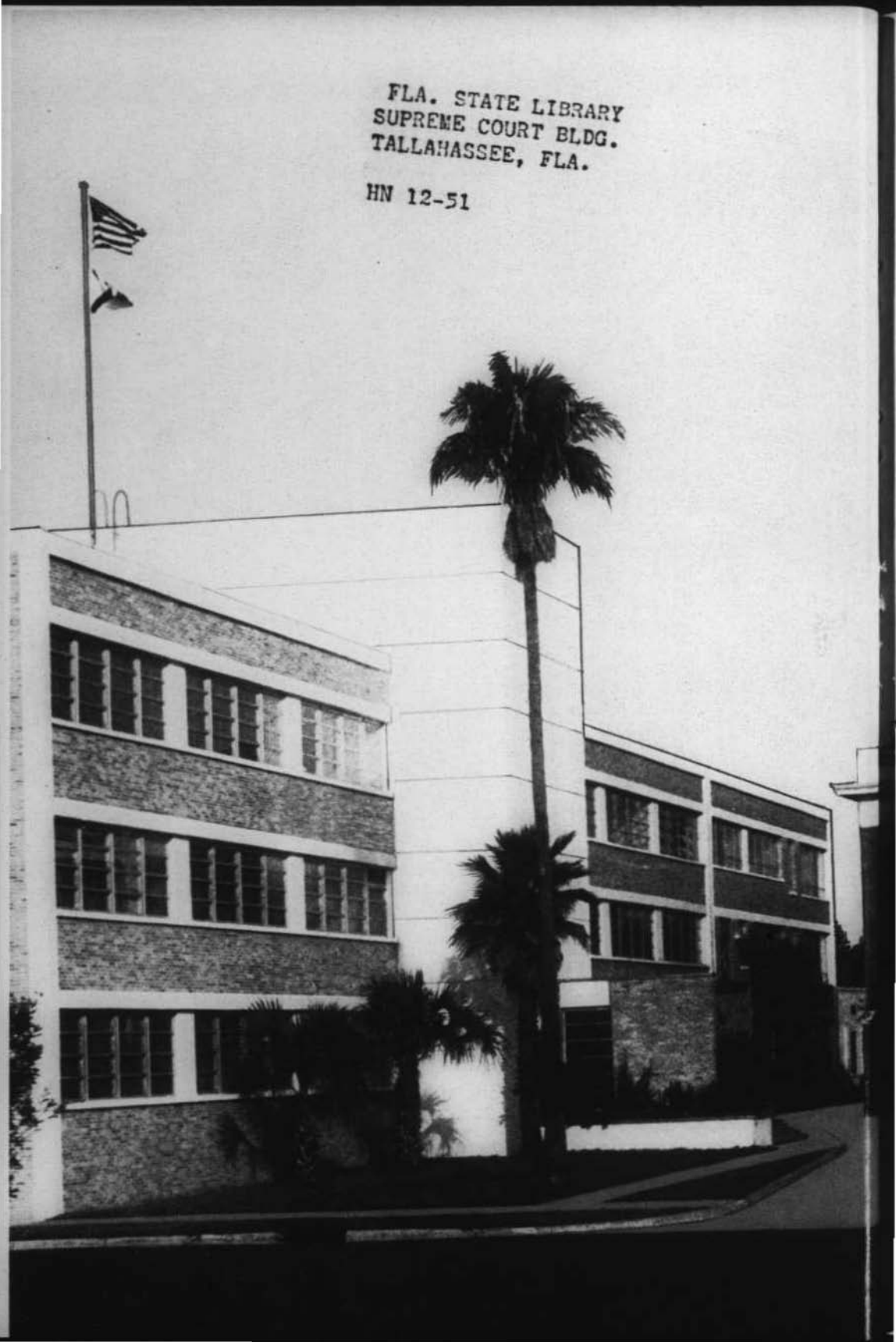

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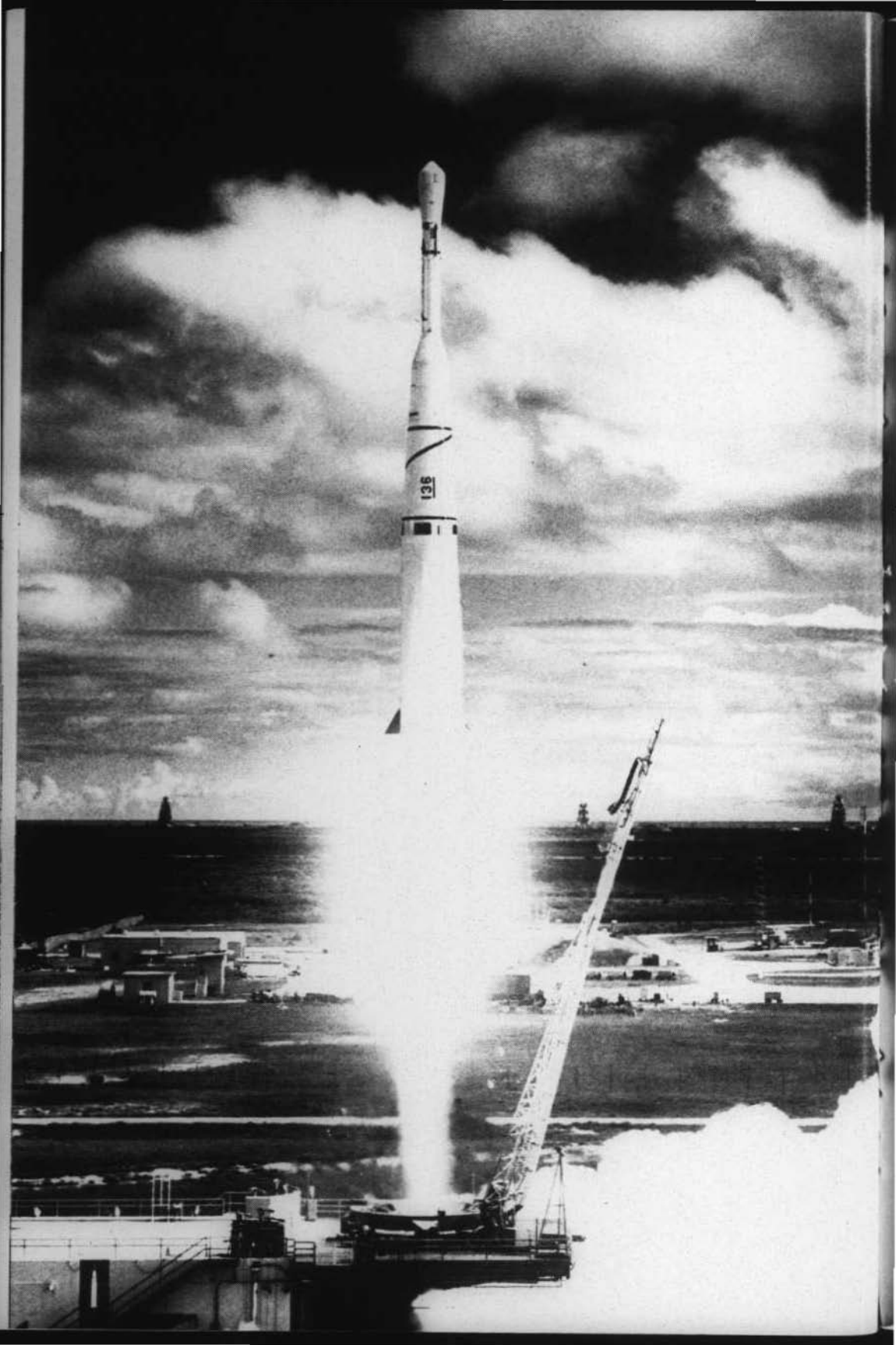
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The BREVARD COUNTY STORY

CAPE CANAVERAL — a name that has brought international recognition to Florida's shores and has set man's imagination afire with dreams of conquering space—has, since 1954, brought complications and problems to the complacent little communities of Brevard County. Try to imagine the impact of a 300 per cent growth in population in five years (from 1954 to date). Put yourself in the position of the county officials who suddenly found they had on their hands not the usual 6,000 school children in the county *but* 21,000, plus mushrooming trailer parks and housing developments, inadequate water and sewerage lines and lack of trained personnel to inspect septic tanks and newly-built eating places. Overworked doctors and nurses and lack of space hampered the activities of the County Health Department. Inadequate roads and streets made travel in the county hazardous. There was even a shortage of electrical power.

Child guidance and mental health activities, immunization and prenatal clinics were in greater demand due to the explosive growth. The operating budget for the County Health Department underwent many revisions—upward—in order to augment this understaffed group.

These are only a few of the mountainous problems suddenly confronted by the citizens of Brevard County. How they rose, and are rising, to the challenge is a tale that has few counterparts in the nation's peacetime history. This is the Brevard County story.

FLORIDA HEALTH NOTES

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Fast Growth

Prior to World War II, visitors to Florida, traveling down the East Coast, passed through Titusville, Cocoa, Rockledge, Eau Gallie and Melbourne with hardly a break in the conversation. U.S. 1 follows the edge of the beautiful Indian River practically the entire length of the county (approximately 75 miles) and if the visitors were not too impressed with the small towns along the way they were certainly awed by the panorama of blue water with jumping mullet, long-legged water birds and distant palms on the thin strip of land that separates the river from the ocean. This was a citrus producing area prior to World War II. For several generations some of the groves of this area had been in the same families. Except for the picking and packing and shipping season the county followed a rather quiet way of life until it was time to pick fruit again. The Indian River fruit is rated among the finest produced by the state.

The population, for the most part, consisted of the families of the grove owners, those who were employed by them and a few commercial fishermen who seined mullet and other marketable fish from the waters of the county. With the advent of Patrick Air Force base at Cocoa during World War II there had been a slight increase in population, but most of the military personnel was absorbed with little difficulty into the normal flow of life in the small chain of communities.

Then, suddenly and almost without warning, Cape Canaveral was selected as the base from which test missiles could be safely fired 'down-range' across a chain of islands which nature must have laid out just for this purpose. The Cape, jutting out from the the Florida coastline, was ideally suited for a Missile Test Center for it was far enough from any densely populated areas to make the missile shots reasonably safe and also to provide a location where maximum security could be maintained with minimum risk.

Large aircraft manufacturing companies secured contracts to build missiles for the armed services. In order to test them personnel were brought to the Cape along with their families. Patrick Air Force Base now assumed larger proportions as a military service area to serve the Test Center. The larger contractors moved in and built test laboratories and assembly plants near the Cape and adjacent to Patrick Air Force Base. With them came their workers, their wives and children. In a matter of two years the population doubled and was still climbing.

The first big problem to wrinkle the brows of the county administrators was housing for all these people. Palmetto and scrub land was bulldozed and leveled to make room for trailer parks and motels. Private capital came forth with money to buy land and build subdivisions. The County Commissioners were faced with the problems of more adequate streets and roads; extension of municipal sewerage lines and proper sewage disposal. Where there were once two loads of garbage delivered daily to the city dump there were now ten, fifteen and eighteen loads arriving with clocklike regularity. Schools were rapidly reaching the overcrowded stage and the problem of finding enough qualified teachers to serve was acute.

None of the existing school facilities was felt to be adequate and the immediate solution was double sessions. Plans for expanding the present schools and for the construction of new buildings were hurriedly made and funds were sought with which to build them.

Gradually the picture became clearer and the needs, as they became known, were given priorities. Although there was substantial increase in taxes because of the influx of people and the construction boom, the lag in assessment and collection of taxes posed some problems. Investigation disclosed that there were some potential State and Federal funds which could be requested.

It would be impossible here to relate all the many and varied situations and problems that arose in all the official agencies of the county. Since we are concerned primarily with the health problems we will confine this issue of *Health Notes* to health needs, the

The following figures indicate clearly the rapid growth of population in Brevard County. It must be emphasized that the figure for July 1, 1959 is a provisional one.

1950	23,700	1955	42,400
1951	24,720	1956	53,500
1952	25,570	1957	72,000
1953	26,430	1958	86,200
1954	38,650	July 1, 1959 (Provisional)	101,500

▶ Brevard County was once a quiet community of citrus growers. This old home is typical of the ones inhabited by the long-time residents of the area.

recognition of those needs and the course of action decided upon to meet these needs. Since many of the other problems were indirectly related to the health of the community, their part in the health picture will also be noted.

People—Problems

When the Cape was selected as a Missile Test Center it immediately became important that those companies manufacturing missiles under government contract bring their engineers, technicians and specialists to the vicinity so they could be close to the work and do their jobs with first-hand information. The workers had to bring their families with them. This meant they had to be housed and fed. In the absence of permanent facilities many of them either purchased or rented trailers in which to live. The existing trailer parks were immediately filled to capacity. New ones were thrown up on newly cleared lands and filled almost as fast as spaces became available.

Motels were built, both on the mainland and on the beach areas of the county. The principal cities of the county, (Titusville, Cocoa, Cocoa Beach, Eau Gallie and Melbourne) suddenly found it neces-

sary to extend their sewerage and water lines to provide for adequate treatment of sewage and pure drinking water. The motel units built outside the corporate limits of these cities were unable to couple up with the city facilities, in most cases, and the problem of inspecting septic tank installations loomed larger each day.

As subdivisions were planned and construction begun the County Health Department insisted on sewage disposal plants rather than to saturate the ground with myriad tank installations which were liable to fail during high water seasons. Problems of this kind were worked out in cooperation with the Bureau of Sanitary Engineering of the State Board of Health.

Many housing developments like this one have, of necessity, sprung up all over the county. With the population growing rapidly housing has been a serious problem.

Careful planning of sanitary aspects in the new schools under construction was necessary. Since the area had for the most part previously been a citrus growing area there were many wooded areas and marshes and consequently a mosquito control program was a vital necessity. More immunization clinics and other clinical services were needed as the population grew larger. More nurses were needed as well as additional sanitarians. Problems related to child guidance and mental health came up and the need for health education of all kinds was evident.

Problems—Solutions

In December of 1957 the Governor appointed a Task Force to make a study of Brevard County with an eye to getting action to overcome the problems. No adequate solution could be found without the facts in hand. The Task Force was made up of people who neither lived in the area nor were associated with the activities there, so that they might bring an unbiased viewpoint to bear upon the problem. Each was a specialist in his line and the study brought to light many interesting facts. When completed, the survey was delivered to the Governor along with recommendations for action.

It must be remembered that the sudden growth had taxed the capacity of the local banks to furnish money for construction mortgages and business financing. Financiers are not ordinarily reluctant to do business, but the ever-present thought that the situation might be one of only short duration made them careful in their choice of investments. Outside capital was needed yet the lack of assured stability made it hard to attract investors from elsewhere in the state or nation.

The Federal government provides special funds for counties whose schools are being attended by children of service personnel stationed in the vicinity. When service personnel are ordered to an area it is neither by their choice nor that of the county involved, therefore, the Federal government has an obligation to assist in the educational program since the child must be educated. Although the families moving into Brevard County were not all service-connected they were required to come to the vicinity of Cape Canaveral because it was selected as a site by the Government from which the missiles could be most safely fired. They were not there because they chose to be. The Government, after some investigation and consideration of the facts agreed that Brevard County could be called an 'impact area' and Federal funds were loosed to help build schools, roads and other needed expansion of facilities.

One feature of the situation was favorable, however. On the average the earnings of the workers moving into the area were somewhat higher than the average for the rest of the state. The crime rate among workers who earn a substantial salary is not as high as it is among the lower economic groups. Also, juvenile delinquency is usually not as prevalent. In addition, the proportionately higher earnings brought a slightly greater tax yield, led to the building of more expensive homes than the average and brought a proportionately greater prosperity to the merchants of the area.

▶ The missile manufacturers have built their laboratories and testing areas near the Cape. This is the front of the Boeing laboratory and the missiles shown here are operational missiles manufactured by Boeing and test-fired at Cape Canaveral.

The Health Department budget for the period July 1, 1957 to June 30, 1958 was $86,389. The population, from July 1, 1956 to July 1, 1957 grew from 53,500 to 72,000, or about a 40 per cent increase. The growth of Florida as a whole had been a fairly steady 5 per cent for several years, so this meant that Brevard County was growing nearly 8 times as fast as the rest of the state.

Using a 58,300 population figure for 1957 (later it was corrected to 72,000) the Bureau of Local Health Services of the State Board of Health estimated that the $86,389 budget would provide a health officer, six public health nurses, three sanitarians and three clerks as well as provide x-ray and preventive dental services. They also stated that to properly provide for a population of 58,300 people it would require from 12 to 19 nurses, 6 to 9 sanitarians, and 4 to 7 clerks. In addition, more adequate quarters for the Health Department would be needed. Since it would be difficult to absorb this many new people into the organization at one time the Bureau suggested that the increase be made at regular intervals over a specified period of about three to five years until the Health Department was operating at full strength.

In 1957 the sanitarians, for instance, (two full-time and one part-time) made more than 5,000 septic tank inspections but had little time to devote to their other activities. They had, of necessity, neglected their inspections of food-handling establishments, schools, trailer parks, local premises and other suburban activities. The need for additional sanitarians was acute.

As time went by certain facts were to come to light that indicated a need for a mental health worker. For instance, the rate of alcoholism was somewhat higher than the average for the state. The success of various organizations devoted to helping the alcoholic help himself has proven that the mental attitude of the individual involved was of prime importance to the task of overcoming his

When the large number of Cape workers, with their families, first came to the county trailers were popular due to the lack of adequate housing. Sanitarians were kept busy checking the water and sewage facilities for the many trailer parks that sprang up rapidly.

problem. Also, the child guidance personnel needed some assistance, though the rate of adjudicated cases in the juvenile court shows that there is a somewhat lower rate of delinquency, based on population, than in many larger counties. Persons with mental illness were in about the same proportion as the rest of the state.

Since problems involving health are due largely to the lack of education on the part of the general public the services of a health educator were desired.

Fortunately, the various county agencies involved faced their problems squarely and with a cooperative effort began to work out their solutions.

There are still some areas where the garbage must be dumped on the ground, burned and then buried before it can safely be disposed of. This condition is rapidly disappearing in the county due to better garbage disposal methods.

More Solutions

Drainage of swampy lands was undertaken to effect better control of mosquitoes and other insects. Sewerage lines were extended and more wells were dug from which to get drinking water.

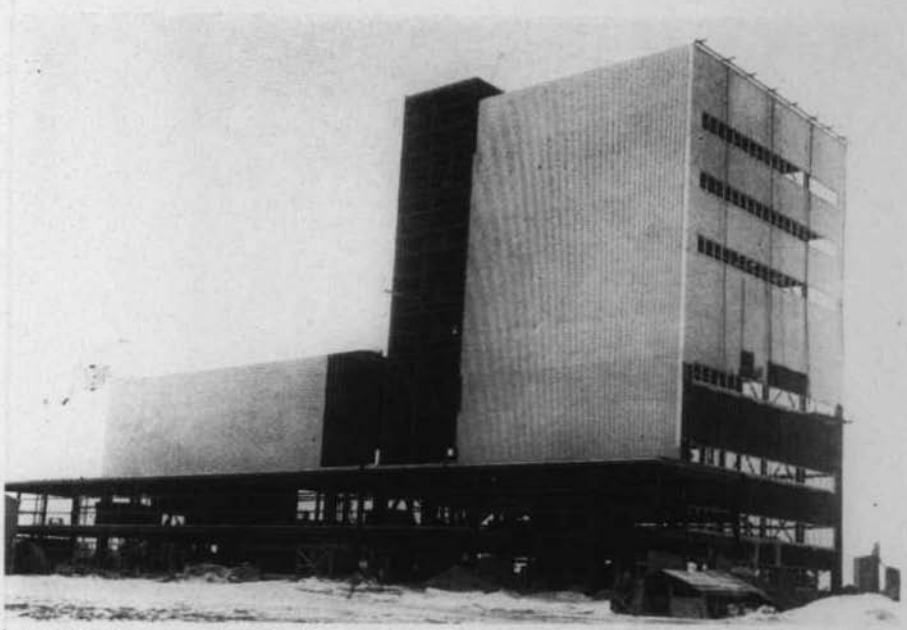
Although there are still a few remote dumps in the area, garbage disposal is now generally being taken care of through the use of sanitary landfills. This method allows garbage and trash to be covered so that danger of disease and offensive odors are minimized while the land itself is being vastly improved. Where once stood

A few years ago this was a salt marsh of nothing but water and sawgrass. Today, using the sanitary landfill method, garbage from Cocoa, Cocoa Beach and surrounding areas is being converted into usable land that will be far more valuable than before.

twisted lantanas growing from the salt flats now lies a flat firm area some four feet above the mean high water level which will some day be valuable land.

Electric power is purchased from the City of Orlando and travels to Brevard County overland on huge power cables. A nine million dollar plant is being erected just south of Titusville and will produce a million kilowatts with only ten per cent of its huge turbines operating.

In 1954 there were 6,000 students enrolled in the county's schools. As of September of 1959 there were 21,000 and the estimate for the next five years is that at least 5,000 more can be reasonably be expected. The county has voted six and a half millions in school bonds during the past five years. Although there are now 28 schools in use, three more are under construction.



Electricity for the area will soon be coming from this gigantic plant which is located near Titusville. Electricity, water and sewage lines, have undergone great expansion in the last five years.

A junior college will open in Cocoa in September of 1960 to be housed in the Junior High School building. It is hoped that a group of buildings can be built to properly house the junior college and when the final arrangements are completed construction will be started.

"We are trying to progress with our methods of education as we grow", said one school official. "We are experimenting with such things as 'team teaching', where two teachers will conduct a class and where many more students will be involved than if they merely taught in separate classes. We are trying out 'departmentalization' in four schools and it seems to be working out fine.

"In Indialantic (one of the smaller communities) some of the patrons of the school are assisting with languages and physical education. Saturday science lectures are enthusiastically received by high school students."

An obsolete missile was purchased for only $100.00 and is being mounted on the lawn of Clear Lake School near Cocoa. The students are naturally "missile conscious," and the science classes are popular.

Eighty-two per cent of the population is Cape-connected in one form or another but these people are not transients. They are relocated families who have been moved here by their employers. An interesting fact concerning these families is one related to juvenile delinquency: of fifteen consecutive cases brought before the juvenile court only one was involved with a Base-connected youngster. By far the majority of juveniles are involved in traffic violations only, with a few petty thefts accounting for the rest of the cases. A counselor for the juvenile court had this to say. "There are probably some very good reasons for it, but it is difficult to say what single factor is responsible for the comparatively low number of Base-connected juveniles that get in trouble with the juvenile court."

He went on to say that he feels there is a need for health education among the teenagers with accent on personal hygiene. "We have had youngsters in the high school group come to this office seeking help and advice with their personal problems. We feel this shows confidence in our organization and it also shows they need guidance and education in matters such as overcoming bad habits, getting along with others and even how to get along with their parents."

One would think that with the influx of masses of people other forms of trouble would also follow. A check with the Bureau of Narcotics of the State Board of Health indicates that with the exception of one arrest in the summer of 1957 involving marihuana there has been no narcotic problem in the county.

Specifics

Until February of 1959 Brevard County and Osceola County were served jointly by one County Health Officer and his staff. In February of 1959 they separated and Brevard County now has its own County Health Department to protect the health of its citizens.

The County Health Department presently maintains three offices and clinics. They are located in Titusville, Rockledge and Eau Gallie. The staff now numbers 27 people which includes a health officer, a mental health worker, a health educator, two x-ray technicians, seven nurses, seven sanitarians and seven clerks. There are also four foremen and four part-time workers. Plans for new health department buildings were drawn and occupation of the new quarters will begin in 1960.

Evidence of growth and expansion in this new County Health Department unit now under construction. The building will be shared with several other county departments but is an improvement in space and quarters for the Health Department. There are two other buildings similar to this one under construction in the county.

Food-handlers, working in county eating establishments, must acquire health cards before they can take a job. These cards are handled by the Health Department. "Returnees" from the state tuberculosis hospitals are contacted by the Health Department and receive periodic chest x-rays and checkups as well as home attention where necessary. An active tuberculosis control program is basic.

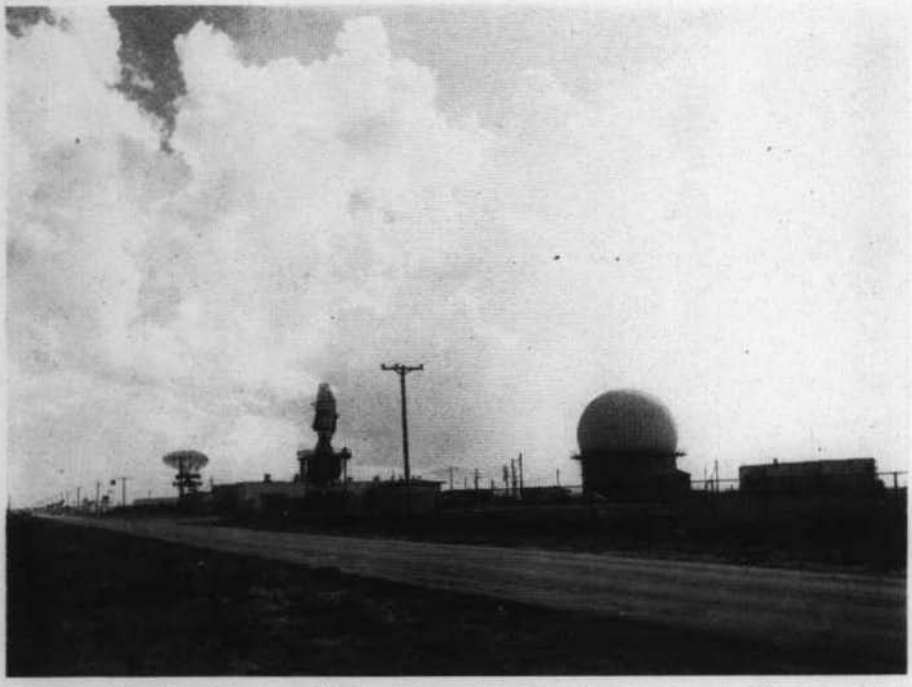
One of the sanitarians serves as quarantine officer for the Public Health Service, meeting foreign ships at sea and inspecting the crew, cargo and papers thoroughly before allowing the ship to enter Port Canaveral. If the ship has come from a country where yellow fever and malaria are prevalent it is thoroughly sprayed to kill insects that might be disease-bearing. When the ship is thought to be safe for entry the sanitarian allows it to proceed to the dock.

The Bureau of Entomology of the State Board of Health went to work on the swamps and salt marsh areas of the county to try to get rid of mosquito and other insect hazards. Miles of ditching and acres of impounded water were necessary to eliminate breeding of

these pests. Draglines, airplanes, fogging machines and manual labor were needed to make the area mosquito-free, but it was accomplished and today the residents live in comfort.

Some concern was felt by the residents over the possibility of air pollution from missile firings. The first to make a study of this possibility were the Air Force medical officers stationed at Patrick Air Force Base. Their interest was keen since they were charged with the responsibility of tending the medical needs of three thousand families of service men stationed at the Base. They also wished to reassure the citizens of the area that the Air Force and its contractors were not creating health hazards. After all, the elements used as propellants in the missiles were classified and were not general public knowledge and there is always the element of rumor which creates public concern unless the facts are made known.

What the medical team found was heartening to the public. As the Center Staff Surgeon put it, "When a missile is fired any possible contaminants are either left on the pad or go off into space. The principal ingredients used are fuel oil and liquid oxygen which



This is a familiar sight to residents of Brevard County. The tourist and visitor is awed at the sight of telescopes and radar antennae casually mounted along the highway.

might create such things as soot, but at the speed which missiles develop at firing there is little time for such things to accumulate in any significant quantity in the air."

There was some speculation about the possibility of radioactivity and fallout in the area. "You have my assurance" continued the Staff Surgeon, "that the total amount of radioactive materials used in any given missile would never be more than exists in the home television set or on the dial of a luminous wrist watch. Although missiles could possibly carry nuclear warheads in time of war there is no such experimentation going on at Cape Canaveral and there are no nuclear fission materials stored anywhere in the vicinity."

The Patrick Base hospital has had some unusual experiences. Among them are those dealing with delivering civilian babies, in cases where the mother could not make it to the hospital in time; and treatment of accident victims who are not actually base personnel. "Our first duty," said the Staff Surgeon, "is to save life, and then ask for names. If we can help the people of the community we will do so, even though it is a technical violation of orders." He hastened to add that this applied only to emergencies which, in their opinion, could result in death or serious personal damage if not assisted immediately, for the Base Hospital is not a public affair.

So the outlook for good health in Brevard County, despite the impact of a surging population growth, is one of optimism and confidence. As the County Health Officer put it, "We have had wonderful cooperation all along the line from the various organized medical groups in the county. The doctors have given freely of their time and talents by helping in our cardiac and well-baby clinics. They have delivered babies of indigent parents at no cost and have given office treatment in cases of indigency.

"The dentists have helped us in our clinics at no charge and have given office treatment to indigent children.

"Our three hospitals that exist at this time are expanding to give more complete services. The Brevard Hospital at Melbourne just recently was the recipient of a half million dollars in Hill-Burton funds (from the Federal government) with which to build new wings. The Wuesthoff Hospital at Rockledge is expanding and also the North Brevard Hospital at Titusville, while the proposed Cape Canaveral Hospital is being planned and will be serving the citizens of the county in the not too far distant future.

"Since 1954 there has been a one-third increase in the number of doctors in the county and we now have every specialty represented, including psychiatry."

"We are fortunate in having a far-sighted County administration and we are getting cooperation and consideration in our problems. True enough, it takes time to solve some of our problems, but we know where we stand and we know that the desire to solve these problems is strong. I am confident that the citizens of Brevard County will never be subjected to poor health standards because of lack of cooperation."

▶ The beach areas of the county boast many fine motels. Here the sanitarian discusses the purification of water used in the swimming pool of one of the finest beach motels.

FLORIDA STATE BOARD OF HEALTH

1217 Pearl Street or P. O. Box 210
JACKSONVILLE, FLORIDA

All Counties in Florida have organized county health departments, except St. Johns County

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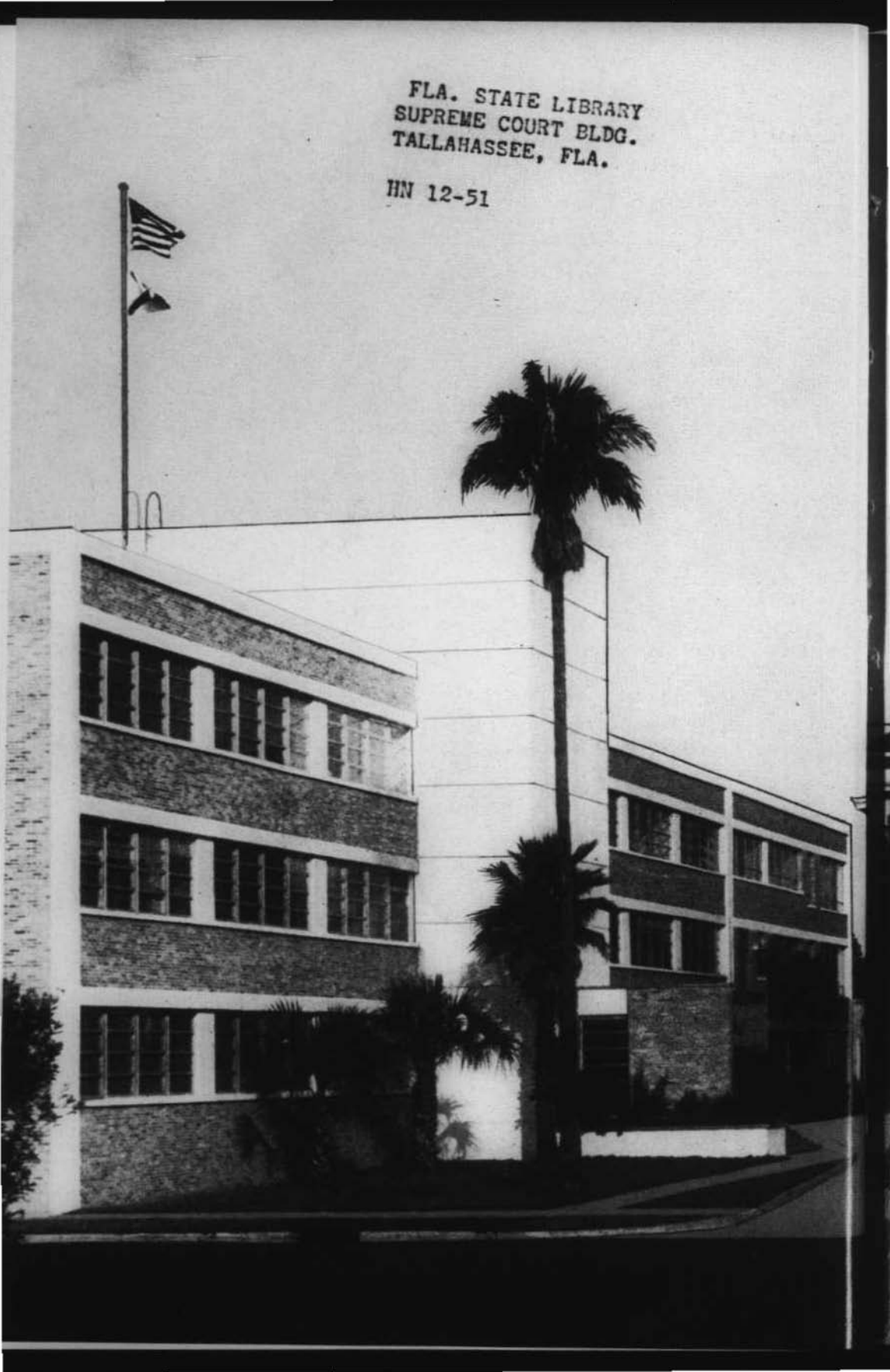

Florida HEALTH NOTES

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Sick Child in School

A cut finger, a headache, or a stomachache usually require first of all tender loving care.

the sick child in school

Recently, on the playground of a Florida school, a child fell while running around a merry-go-round. Normally she would have bounced up laughing, brushed off the dust and gone back to chasing her classmates. However, as she fell the turning base of the merry-go-round had struck her left knee and gashed it. She was led crying from the playground to her classroom. The teacher took two paper towels from the shelf, told the student to go to the rest room and wipe off the blood. The child did so and after she returned to the room the bleeding had stopped. That evening her mother washed it out thoroughly and put a bandage on the wound. The next morning the child went to school, limping. When the mother examined the wound that evening it was evident that infection was beginning so off they went to the emergency room at the nearest hospital. The doctor cleaned the gash thoroughly and then put five stitches in the knee. A tetanus booster was administered.

At another Florida school a fourth-grade boy came to class feeling ill and complaining of a headache. The teacher felt his forehead, told him he had fever and sent him to the office. The principal sent him home. Since both his parents worked there was no one at home to receive him so he stayed home alone the

rest of the day. When the parents arrived from work the family physician was called. Measles was the diagnosis.

An adult lecturer, making the rounds of several schools, reported to the principal's office of a school in which he was to make a talk. He noticed a crying girl sitting in the room but paid no particular attention to her. After several minutes discussion the principal, gesturing toward the crying girl, asked him if he had ever had measles. He replied that he had and felt he was immune. Two weeks later he was bedridden with scarlet fever. His youngest boy, age 5, also contracted the disease.

These are only a few instances of incidents which have occurred in our schools but they are indicative of the potential hazards school children face and emphasize a health problem about which County Health Departments, school systems and the Florida State Board of Health are much concerned. Reciting these instances are in no way intended to imply that school personnel are cold and heartless where the pupils' injuries or illnesses are concerned. Quite the contrary. But a teacher with a classroom full of students or a principal with numerous administrative problems simply cannot give the time that should properly be given to a sick, shocked or frightened child. So there has to be some system worked out for seeing that the children are taken care of in times of illness or accident and yet allow the school to function to the best advantage for the well children.

For instance: in many counties the PTA mothers took over the task of manning the "sick rooms" in the elementary schools. This was voluntary service and was done to lighten the burden that sick children place on teachers and principals. Some of the volunteers had had first aid training at one time or another and they were a nucleus for training some of their colleagues. In many instances there were no volunteers available who had been trained in first aid and the assistance given to the sick or injured children consisted of using a mother's common sense.

But now a plan has been inaugurated in Bradenton (Manatee County) which is now spreading slowly around Florida

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This school principal stated "Our school was the first to welcome the Gray Ladies. I don't know now how we ever got along without them."

and which is being noted nationally. In Bradenton a group of ladies had received many hours of instruction to prepare them to serve as Gray Ladies in a hospital. Due to a change in plan the trainees would not be able to give the service for which they had been trained. As the Executive Director of the Bradenton Chapter, American Red Cross, put it:

"We had this group of more than eighty ladies trained in all the phases of the Gray Lady work. We were unable to use them in the hospital and we had no plans for them. Then, at a Business and Professional Women's Club meeting, a local teacher suggested that we put them in the schools to look after the ill or injured pupils. It sounded like a good idea. We gave it immediate attention, made clearances with school and public health authorities, as well as with our National Red Cross Representative, and eventually we were ready to give the added training and the program a trial.

"From the very start it worked out fine. We learned as we went along and we also devised some variations of our existing techniques. One important step was to get the sanction of the local medical society. Through them

The Gray Lady routinely checks temperature of youngsters who say "I don't feel so good." Gray Ladies neither diagnose nor prescribe for their young charges.

we came up with some important "don'ts" for the Gray Ladies. We have now finished three years of work in the schools and the program is just as strong as it ever was and there are as many ladies volunteering their services as for any project we have ever undertaken."

TLC — (tender, loving care)

One of the first things learned by the administrators of the plan was that it takes a person of patience and understanding to perform the Gray Lady duties in the schools. Many of the problems involved are not really concerned with physical matters, although they might manifest themselves in proclaimed physical disorders. "My stomach hurts" or "My head aches" are sometimes just another way of saying "I'm homesick" or "I didn't prepare for the test coming up this afternoon." Experienced Gray Ladies may, after checking for elevated temperatures and skillfully asking questions, provide the counsel, tenderness and

firmness that results in the student going back to the classroom and continuing the day in a better frame of mind.

But although the greater majority of the cases meticulously entered in the "clinic room" log books are minor in nature there are also serious problems at times — and this is when the Gray Lady must adhere strictly to the training she has received (prior to being permitted to serve in the school), and to her "standing orders." When a child falls from a piece of equipment on the playground and is lying unconscious, the Gray Lady (as well as the teacher) must instantly know what to do and, even more important, what NOT to do. She must remain calm and level-headed in the face of the situation and draw heavily on her training in the Red Cross first aid classes.

What do the children think of the Gray Ladies? Perhaps the best answer can come from a glance at the log books. It is not uncommon to find the same children reporting almost daily to the Gray Ladies with first one minor problem and then another. For example, we are reproducing here one page from a log book which is about average for any day in the school semester:

Wednesday, September 3, 1958
Number of Hours in Infirmary,

5. (Only one Gray Lady on duty)

Here an instructor is demonstrating the technique of mouth to mouth resuscitation. The Gray Ladies are kept abreast of the latest methods in first aid.

Number of children seen, 9

1. Solter B. Headache, upset and crying, Temp. 98.6, bed rest, class.
2. Glenda A. Feels badly all over. Temp. 98.6, Bed rest, Temp. 99, ½ hour later.
3. Ernest R. Feels dizzy, Temp. 98.6, cool cloth on head, bed rest.
4. Marilyn M. Earache, Temp. 98.6, cotton in ear, bed rest.
5. Pickle D. Blisters on both lit--tle toes, bandaids, class.
6. Dixie Lee P. Blisters on heels, bandaids, class.
7. Patricia P. Hit in eye with softball, did not break glasses. Cold compress, bed rest.
8. David G. Neck hurts. Temp. 98.6, Says mother took him to Dr. who taped it. bed rest.
9. Chester D. Headache, Temp. 98.6, bed rest.

"I suppose," said one of the Gray Ladies who has been active since the beginning of the program, "the children looked at us as if we were some sort of ogres who were just waiting for the chance to jab 'em, twist 'em, pull at 'em and snatch 'em until they were torn to shreds. But it wasn't long before we had had a chance to show them what we were there for and their attitude changed from one of wariness to that of confidence. Pretty soon we were their 'mother-away-from-home' and they saw to it that we worked the whole time we were in the clinic room."

"Yes," added her coworker on duty that day, "and it wasn't long before we began to learn that we were being used for other things, too. For instance, a little fellow came in here one day obviously in a big hurry. He uncovered a small bruise on his leg and as I touched it up for him he asked me 'Do you know the name of our Chief of Police?' Without thinking, I told him. Later I found out that was a question on an examination he was taking and to which he didn't know the answer!"

Who Shall Serve?

At first it was thought that the Gray Ladies should be the mothers of the children enrolled in the school. Time, however, proved that this was not necessarily so. There were others, childless or older women whose children were grown, who were especially adapted to the service, either by inclination or their understanding of childish human nature. These were also permitted to join the ranks and serve. It is significant to note that a large majority of the Gray Ladies in the Bradenton area schools are not parents of children in school and many of them are "retired" and have found a new use for their leisure time. The association with the youngsters supplies them with elements missing in retired life and, as one of them put it "I have seven grandchildren who live away from here. By helping out in the schools I

This senior citizen of Bradenton lives a life of retirement in her mobile home, and finds her duties as a Gray Lady gratifying.

am, in a way, helping my own grandchildren."

Recruiting new Gray Ladies to fill gaps left by those who must drop out is not at all difficult. In Sarasota, the chairman of the Gray Lady program had this to say, "We started this year with five vacancies. When we announced that we would accept applications to fill them we had thirty-five ladies come to the meeting."

Since there are more applicants than vacancies each year careful screening can be done. Screening of applicants is necessary so that persons best fitted to the job are selected. Major qualifications are a pleasing personality, level head, good common sense, patience and calmness. As the weeks go by and the training program goes on, a few drop out because of personal reasons. By the time training is completed,

The first aid classes teach the candidates how to properly apply a temporary splint to an injured limb. Twelve hours of first aid training are given the ladies volunteering to serve in the school Gray Lady program.

the group has pretty well screened itself and is ready to go to work.

The story is told of a student who desperately wanted his mother to be a Gray Lady. She concurred but then told him she would be unable to serve because they simply would not have enough money for her to buy the uniform — it costs about eleven dollars. He thereupon got a paper route and went out and earned the necessary money so she could purchase the uniform and continue the course. It turned out that the sight of his mother in a uniform was what really intrigued him!

Gray Ladies are given complete orientation in Red Cross and Gray Lady technique and ethics in addition to their ten hours of first aid training. Further, the Manatee County Medical Society cooperated with the Red Cross Chapter to draw up a few simple "don'ts" which the ladies are careful to observe. Some of these warnings are elementary and yet can be so very important at a time of crisis. For instance: the first "don't" that is

Gray Lady candidates are instructed in cleanliness and sanitation necessary to the proper operation of the school first aid room.

impressed on a Gray Lady is "Don't try to diagnose any illness." For imagine your reaction if a Gray Lady called you at home or work and said, "You had better come get your son out of school—I think he has polio." Other "don'ts" include a list of common drugs such as aspirin, cathartics, cough syrups, etc., which the Gray Ladies may not give to the children. This again would be diagnosing and prescribing and this is left to the parents and their private physician.

One important question that had to be resolved before the program could be put into satisfactory operation was, *"Who assumes the responsibility for a sick or injured child at school?"* If the Gray Ladies take over the sick rooms and operate them, are they also responsible for anything that should happen to the child? Who should take a sick child home if it is necessary? Who notifies the parents? Who should call a doctor and/or an ambulance, if needed in an emergency? Does such responsibility and authority rest with the School Board, the principal or the Gray Lady?

The problem was easily solved. The School Board, Red Cross

administrators, County Health Department representatives, principals of the schools involved and the County Medical Society Committee members met and worked out the details through a careful study of potential situations that could develop. As a result, the Medical Society and the County Health Department agreed that certain services by the Gray Ladies would be helpful to the child's comfort and well-being. The school authorities and the principals agreed that the child was the responsibility of the principal as long as he was on the school ground—attending school. Therefore, on October 3, 1956, a written agreement was entered into by the School Board and the Red Cross. The agreement, which is shown at the back of this issue of *Health Notes*, states in simple terms the full responsibilities and limitations of each and is evidence of the simplicity with which such matters can be handled. This agreement is basically the same as those which have been adopted in the 11 Florida counties which have put the Gray Ladies in their schools.

The relationship between the Gray Ladies and the county public health nurses is a close one.

Reactions

How do the schools feel about the program? Perhaps the best place to get this information is from letters on file in the Red Cross office. One letter reads, "Walker Junior High School would like to thank the Manatee County Chapter of the American Red Cross for the wonderful help of the Gray Ladies who staff our clinic. It is wonderful to have them here to care for those who need first aid and those who need to be put to bed temporarily during the school day. We just don't remember how we managed to get along without the services of these trained Gray Ladies. We feel that their being here is of great value to the school, because it assures our teachers that the students in the sick room are well cared for. By helping to make our school better, we feel that the community benefits from these services too." It is signed by the principal and the dean of girls.

Another, a copy from one of the county schools, reads in part — "The service of the Gray Ladies in the Manatee County schools is one of the finest things that has occurred here . . . One of the most interesting facts is that the Gray Ladies are as happy to serve as the schools are to have them . . . This program fills a great need, especially in the elementary schools . . . Many small children need to be assured more than they need first aid . . . The program here is very successful and we wonder how we ever got along without the School Gray Ladies."

Another principal writes: "We wish to thank you so very much for our Gray Ladies. Their assistance to our teachers and to our children is tremendous and we are so very, very grateful for them!"

WHO IS RESPONSIBLE FOR THE HEALTH OF THE SCHOOL CHILD?

It has been pointed out that while the child is at school he becomes the responsibility of the principal. But a fact that should even be better remembered is: that the school is only a substitute parent —and that the child's parents or guardian must make decisions concerning his health. This is why most schools ask parents to fill out a card which shows (among other information) where the child's parents work (if both are so engaged) and if they are not usually found at home, where they, or some responsible person, can be reached. The name of the family physician is also requested in case a real emergency arises.

Articles telling the Gray Lady story appeared in THE FLORIDA ELEMENTARY PRINCIPAL and the JOURNAL OF THE FLORIDA EDUCATION ASSOCIATION. Local newspapers printed feature stories about the program. Slowly at first and then more rapidly, the word spread around the state about

what was happening in the Manatee County Schools. Inquiries came in (and were answered) concerning the steps that should be taken in order to inaugurate this plan in other counties. By the end of the second year eleven chapters of the Red Cross were training Gray Ladies and using them in the schools.

An enthusiastic Gray Lady from Manatee County even flew her private plane to a sparsely populated inland county in order not to waste any time in responding to a request for information on how to get the program started.

About this time the following note appeared in the Red Cross publication from Manatee County: It is headed

"TO THE UNIFORMED VOLUNTEER"

"If you are stopped by an unknown 'small fry' on the street with a 'My toes is all right now — wait I'll show you', or 'This is the brother I wanted you to see', or 'My new sister *finally* got

In a school sick room such as this one the ill or injured child is comforted and his immediate needs cared for until his particular problem is settled.

here', don't be disconcerted. A Red Cross uniform rather than an individual is recognized by Manatee school children."

Other Methods

Other counties care for their sick children by other methods. For example, a large Florida county has had a program for many years which requires all teachers to complete a Red Cross twelve hour course in first aid. The teachers are given one hour of instruction each week for 12 weeks. In addition, a sick or injured child is sent to the principal who also makes use of his first aid knowledge in deciding whether the child should be sent home or returned to class.

In this same county the principals are also instructed not to give any medicines by mouth, which includes aspirin. One more thing is stressed — if there is blood from a cut or an abrasion they are instructed to clean the wound with soap and water and then apply peroxide. This is recognized as good first aid procedure to minimize dangers of tetanus infection. One standing rule has always applied, "The principal must be informed of any injury or illness, no matter how slight." This is the responsibility of the teacher.

Once each week a public health nurse is a visitor at the school and at that time sees all cases where there has been illness or injury. She determines whether the child should be kept home from school or whether he may continue in the classroom.

In another county the PTA members assume, on a voluntary basis, the job of manning the sick room and serving in much the same capacity as the Gray Ladies. They usually are required to take a short first aid course and a brief period of orientation. Also, the regular visits by the public health nurse keeps them up-to-date.

Although the problem of the sick or injured child has been with us since schools began, the best solution to it has always seemed to elude educators. Most of them, when questioned about it, regard this problem as an occupational burden assumed by a teacher when he or she enters the profession. Most of them are very interested when the Gray Lady plan is discussed with them.

Why Not A Professional Nurse On Duty At All Times?

The above question is frequently asked by parents. Obviously it would be an ideal solution but a study of the number of cases that actually require the services of a professional nurse indicates that such cases are so few that the cost does not warrant it. Furthermore, *a professional nurse cannot prescribe medicine or treatment* any more than can a lay person. If she does so, she could be sued for

practising medicine without a license. The mother who cries, "But suppose my child were to hurt his leg or break out in a rash?" need only be told that anyone who has had a first aid course should know what to do. In the first instance, the leg would be put "to rest" with a temporary splint until a doctor could see him. In the second, the child is the responsibility of his parents who should be notified of his rash — and who will carry on from there. Also a Florida county with a hundred schools would, therefore, require a hundred professional nurses. Since there is a shortage of nurses in both health departments and hospitals there would be the serious problem of recruitment.

The services of the County Health Department in 66 of Florida's counties are available to the schools and are utilized rather broadly. Many children are referred to the public health nurses for follow-up after illness or injury. Sometimes the illness turns out to be communicable — and this poses a problem for those who have been exposed at school. The Health Department nurses also check on children who have had one of the more serious communicable diseases and determine when they might safely return to school. The public health nurse's constant visiting in the homes results in a two-way interpretation: the nurse tells the teachers about what she finds in the home that may be affecting little Johnny's school work. In turn, the nurse may try to give the parents an idea of what the school expects of the child — and of them. What makes the public health nurse such a valuable ally of the school personnel is that they know that the child does not exist simply as a "student" in the school. He is the member of a family, among many families which make up a community. And that home problems will contribute to whether or not Johnny is able to learn and take advantage of the school's resources.

It Takes Cooperation

The Gray Lady Program is, perhaps, the first effort in Florida by a voluntary organization to assume the task of caring for school children, and the fact that it is meeting with wide approval is an indication that it has features that make it a plan to be considered when this knotty problem is discussed. Undoubtedly there are other plans which have not been discussed here.

But whatever the plan, the cooperation of the voluntary organization, the School Board and the principal of the school and his staff must be complete. The counsel of the local Medical Society and the County Health Department must be sought and parents should have a thorough understanding of the plan before is is put into operation.

WRITTEN AGREEMENT FOR THE MANATEE COUNTY CHAPTER PROGRAM FOR GRAY LADY SERVICE IN THE SCHOOLS

It is recognized and agreed that the school is responsible for the physical welfare of the child while on the school grounds or in the buildings and also the development of good health habits; therefore, any health care that is given to the child while in school should be under the direct supervision of the school authorities, with the approval of the local medical authorities.

The school will designate a person to whom the Gray Ladies report, and this person, or persons, will be responsible for the school orientation, supervision (see paragraph #5) and on-the-job guidance.

The Manatee County Chapter of the American Red Cross will recruit and train Gray Ladies for assignment in the schools.

The person in the chapter and the person designated by the schools will work closely together in the supervision of these volunteers, in order to maintain standards and see that only the duties approved by the local medical authorities are performed.

The chapter training will consist of:

1. Orientation to Red Cross — 2 hours
2. Introduction to Gray Lady Service — 1
3. School Job Orientation—minimum — 1
4. Review Session — 2
5. Standard First Aid Course — 12
6. Those portions of the Red Cross Home Nursing course that would better enable them to carry out the standing orders such as:
   proper handwashing
   safe waste disposal
   temperature taking; care and cleaning of thermometers

Any of the duties and procedures as outlined in the First Aid textbook, chapter 2 through 10, may be included in the standing orders, except when local medical authorities suggest other procedures.

It is understood that these volunteers will not

1. Diagnose nor prescribe
2. Give any medication
3. Have anything to do with care of eyes or ears
4. Open or treat abscesses
5. Care for wounds, except those the volunteer has been trained to care for through the Red Cross Standard First Aid Course.

The Red Cross chapter and the school will assume joint responsibility for seeing that this agreement is interpreted and understood by all those involved.

Signed
Supt. of Schools
ARC representative

Dated Oct 3, 1956

PRINCIPLES TO GUIDE ALL GRAY LADIES

"Do nothing to any child that you would not want another Gray Lady to do to your child."

DO'S AND DON'TS

Revised October 1958

DO'S

1. Stay with and give moral support to the sick and injured child.
2. Give first aid as taught in the Standard First Aid book only.
3. Call the principal immediately in case of major accidents. (Re-read the first ten chapters of first aid book occasionally.)
4. Record temperatures accurately—NOT "no temperature", or "temperature normal".
5. If a child appears definitely ill, notify principal *regardless* of temperature reading.
6. Let the principal or secretary call parent unless you are instructed to do so.
7. Call principal's attention to unusual cases, chronic repeaters, etc.
8. Fill in individual record sheet, or card in infirmary file—also fill in the Red Cross log book in detail.
9. Let your chairman know if you are unable to report for duty, so a substitute can be called.
10. Wear your uniform with pride—cap off when off duty.
11. Leave school problems to the principal and school staff. They are responsible for them.

DON'TS

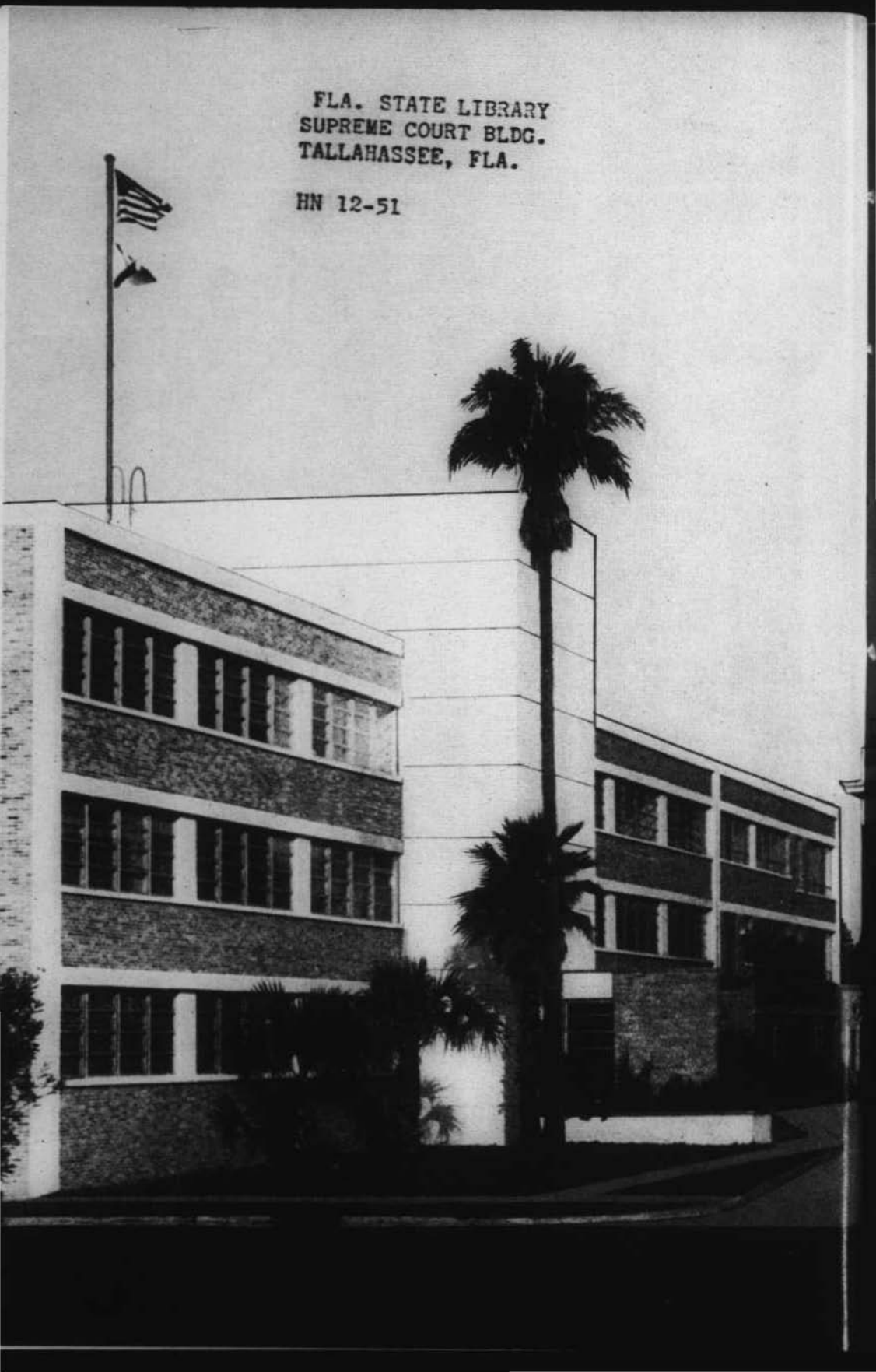
1. Don't diagnose any case.
2. Do not give any medication— (this includes aspirin), not even with a written request from the parents.
3. Don't discuss any cases with anyone except the Gray Lady Chairman, principal, secretary or visiting (public health) nurse.
4. Don't tell the parent what to do or what you think is wrong with the child. State only what happened, or what the child's temperature is, and what has been done.
5. Don't treat eyes or ears in any manner.
6. No "gouging" to remove splinters.

FLORIDA STATE BOARD OF HEALTH

1217 Pearl Street or P. O. Box 210
JACKSONVILLE, FLORIDA

All Counties in Florida have organized county health departments, except St. Johns County

FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892



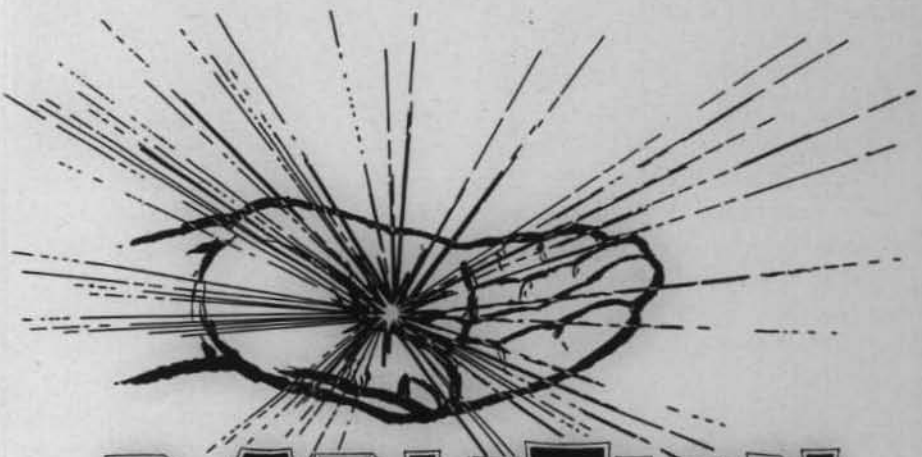
HEALTH NOTES

VOLUME 52 • NO. 4
APRIL, 1960

RADIATION!
FRIEND OR FOE

Each area using radioactive material is required by the Atomic Energy Commission to post conspicuously a sign bearing the above symbol and wording.

On a background of yellow the above symbol is printed in magenta or purple.



RADIATION
friend/foe

Some fifteen years ago a Japanese city literally disappeared in a flash of light that shone as bright as any sun — and mankind entered the atomic age. From then on man was to learn to use radiation, to respect its power and to protect himself against its dangers. Radiation's potentialities are fearsome, wonderful, destructive, life-giving — and we are far from knowing all about it.

Ponce de Leon, seeking his Fountain of Youth in Florida, found "natural" radiation in Florida, tho he never knew it. It penetrated his armor and his body, but the radiation in nature was no problem to this great explorer. For from the sun and sky come the cosmic rays that have always surrounded man — and which scientists are now beginning to measure and ponder. He probably was exposed to minute amounts of radiation that come from some outcroppings of rock and from underground waters in which he bathed. This traveling Spaniard and the Indians who inhabited the land on which he searched for the Fountain of Youth absorbed in their bodies during a lifetime the same amount of natural radiation that we do today.

Florida, the same as other states, faces the problem of ionizing radiation today. Hundreds

of users of radioisotopes, licensed by the Atomic Energy Commission, are using the free flying electron and other rays to check the thickness of paper, to find flaws in welds, to trace chemicals through life channels of plants and animals. Atomic power plants are planned for the near future. The University of Florida is using a nuclear reactor in its laboratories, and Florida State University has an ion accelerator in operation. But the most important of all to the average citizen, doctors, dentists and other practitioners of the healing arts are using the penetrating Xrays to diagnose disease and broken bones and to kill cancerous growths.

What is Radiation?

Books have been written trying to answer this question—yet a simple answer we must have if we are to proceed.

All matter is composed of atoms of various elements, which make up the molecules of the chemical compounds of which all tangible things are made. Until Curie, Roentgen and those who followed them showed otherwise, it was thought that these atoms and elements were stable. Scientists discovered that radium, and certain other elements, were not stable. They gave off rays that were actually parts of the atom, flying off into space some at the speed of light, and capable of penetrating, in various degrees, anything in their path.

Still more was learned, and the electron tube was born to become the basic element of all radio and television transmission and reception. Even earlier, penetrating X rays were harnessed literally to see through our bodies and tell doctors and dentists about conditions inside.

The emissions are broadly classified as *alpha, beta, gamma* and *X rays* coming from different parts of the atom. The *X* rays and *gamma* rays are the deep penetrators, but all or these rays are of concern to those whose responsibility it is to protect us from harm.

It is well to stop here and point out that we need have no fear of the ordinary radium dial watch or clock, or the face of a television picture tube in the home. These objects present no

FLORIDA HEALTH NOTES

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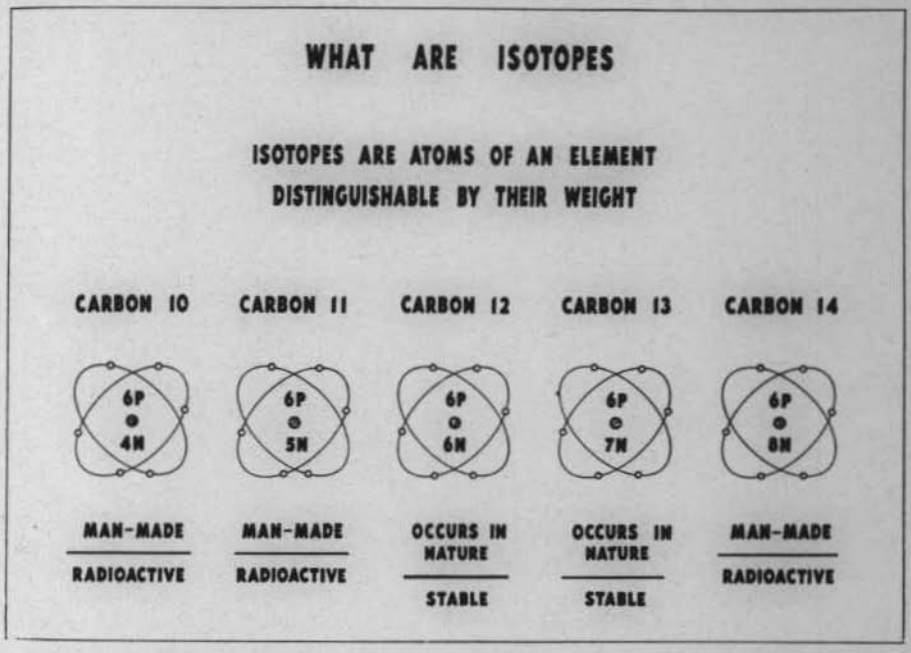
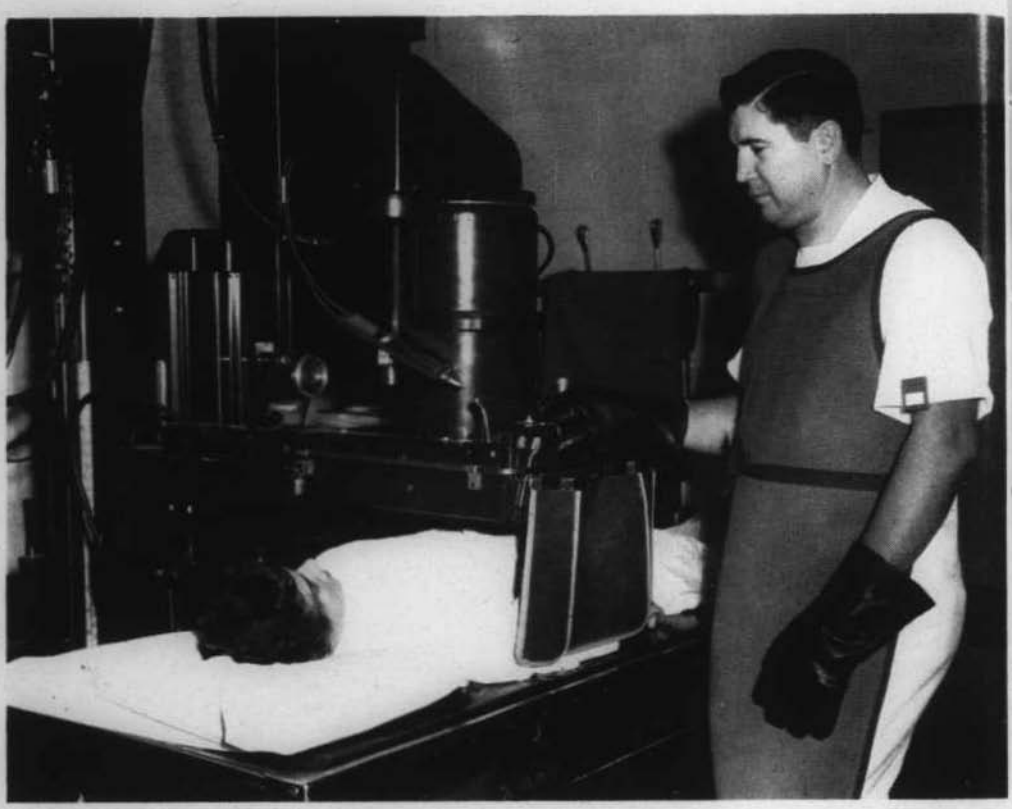
hazards in ordinary use.

But the penetrating ionizing rays, emitting naturally from radium, uranium and other elements; and from man-made isotopes, X ray machines and nuclear reactors can harm us. They can harm us by entering our bodies and bombarding the atoms of which we are made, causing them to lose electrons and thus changing their nature.

This change is slow and subtle, and its effect is cumulative. Only in the atom-bombed cities of Japan have there been instances of groups of human beings receiving enough radiation at one time to cause quick death. Some of the early experimenters with radium and X rays are now known to have died of its effects, but many of them lived for years. Death and disability are still being observed in Nagasaki and Hiroshima from the effects of the bombs. Radiation can neither be seen nor felt, and even a substantial dose can be months or years in showing its symptoms. Also, people vary as to their reaction to these rays.



Precautions are being taken in atomic power plants and around nuclear reactors to prevent the users from receiving the massive doses which could cause early death. With the general public the problem is far less acute. For the average citizen, it is a matter of preventing a slow accumulation of radiation effect over a



A radiologist studies the patient's heart with a fluoroscope. He is protected from stray radiation by a leaded apron and gloves and by a leaded skirt on the machine. The film badge he wears on his sleeve measures the amount of radiation to which he is exposed. This fluoroscope is equipped with an image amplifier which reduces the radiation exposure to the patient.

long time that will be harmful. Somewhat more important is the necessity of preventing an accumulation, during early adult life, that will be harmful to the reproductive organs, causing possible damage to offspring generations hence.

Let us keep in mind that in speaking of ionizing radiation we are dealing both with X rays, and radiation from the reactors and isotopes used in medicine, industry and research. Both have been, and will even more in the future be, of inestimable value to man. It is estimated that about half of the radiation a human being receives comes from X rays. This is a diagnostic and therapeutic tool which need not be feared, merely respected and properly used. (Be sure to read the article on the center pages of this issue of

Health Notes. It lays out fairly and squarely the facts concerning X rays.

What Is Being Done?

Florida is moving swiftly into the atomic age. The University of Florida recently dedicated the first reactor in the state. It is being used as a training tool in the science laboratories, and advanced students and professors are using it for basic research, to find even more ways in which the power of the atom can benefit our people. It is also being used to produce isotopes for the medical school and other laboratories at the university.

Florida State University has just installed an ion accelerator, a twelve million volt electron beam machine said to be the second of its kind in the nation. The device is used for research into the phenomena created when elements or compounds are bombarded with an electron beam.

There are already over two hundred licensed users of nuclear materials in the state. They include many industries and medical groups. The industrial users employ isotopes in many ways, to check the flow of materials in pipe lines, and to gauge the level of liquids in giant storage tanks, to check thicknesses of paper and find flaws in welds, to show when cement mixtures contain the right amount of water and to indicate the rise of fertilizers in plants. In the latter case a "tagged" material — a substance which has been made radioactive so that its presence can be detected—is used, its position, movement or intensity is detected by instruments.

These substances are also widely used in medicine, both for diagnosis and treatment. Certain chemicals are known to accumulate in certain parts of the body. Iodine accumulates in the thyroid, calcium in bones, joints and the bladder, and so forth. When made radioactive, these chemicals can be administered and then detected, and the volume and position of the tagged chemical can tell the physician many things. Powerful isotopes can be enclosed in tiny capsules and inserted in the body by surgery or through natural openings and their rays used to stop the growth of cancer cells. This seems paradoxical when we remember that some rays, improperly or accidentally reaching parts of our bodies, can actually change the nature of cells and cause cancer. We must remember of course that this inconsistency applies in many other things. Nitro-glycerine, which can blow us to bits, is a valuable medicine in some forms of heart disease.

Radium, which we might call the "granddaddy" of radioactive

materials so far as our knowledge and use of them are concerned, is still a powerful weapon against cancer. A tiny amount of radium in the point of a needle is widely used to attack skin cancer and similar conditions around the face and head, where other forms of radiation are not practical.

Protection

Let's repeat—the peaceful uses of atomic energy are many. We merely have to treat it with respect.

A great deal could be said about what is being done to protect atomic workers who spend their days close to a source of ionizing radiation. But it does not concern the general public. We are interested in it only by comparison. You have seen the high wire fence that keeps the public entirely away from the high tension wires of an electric generating plant. The people employed there walk casually around this danger area, and accidents are rare. They know what they are doing, and they have a very healthy respect for the "hot" wires. So it is with radiation. Trained workers go about their tasks seemingly unconcerned. But they too know what they are doing, and they know that massive walls of lead, concrete and steel stand between them and the radiating elements.

Three instruments on the roof of a building collect radioactive fallout to be measured. The device at left, equipped with a special gummed paper, collects particles of radioactive material large enough to fall by themselves. A rainfall gauge, center, collects rain and snow for radioactive measurement. At right is a high-volume air sampler which filters all particles from a measured amount of air for testing.

The Atomic Energy Commission has considered the opinions of the world's best nuclear scientists, and has adopted standards of safe radiation absorption, both for the above workers and for the general public. This absorption, to be accumulated over a lifetime, is measured in REMs. (The initials stand for Roentgen Equivalent Man.) This indicates the maximum permissible exposure that man can have without the probability of body damage. The experts tell us that a man who does not come into contact with any source of man-made radiation including X ray will receive a lifetime dosage of approximately 5 REM's They assure us that man can probably receive twice as much more than this without any harmful effect.

Of the two kinds of radiation —man-made and natural—we need only concern ourselves with the man-made. The chances of obtaining too much radiation from a natural source are extremely remote. A person who decided to set himself up as a hermit in a uranium mine might get too large a dose of radiation, but that is about the only way he could do it with natural radiation.

X rays

Since, as we have said, at least half of the man-made radiation to which we are exposed comes from medical X rays, let us consider that first. X rays have been in use for over half a century, but for a good part of that time the machines were scarce and expensive and the practitioners who knew how to use them were few. Little thought was given to possible danger from exposure, but the average person was seldom X rayed, and the problem was not acute. But in recent decades the machines were improved, better film was devised, more practitioners began to make use of the apparatus, and better knowledge of the many things X ray could reveal was accumulated. Nowadays an individual may receive quite a few X rays in the course of his medical history.

To make sure that the public receives only the tremendous benefits of X ray, medical schools are teaching their students safe X ray practices, manufacturers are building in filters and shields to better protect the operators of the machines and the patients from excess irradiation and cones are used to better focus the rays. Both in public health and private practice, the use of the X ray as a tool is being kept at the level of practicality and need.

At the request of professional societies and groups, teams of trained technicians are examining machines and suggesting the addition of shields and filters and the use of cones which will

Both Sides o

The International Commission on Radiological Protection has set a maximum limit of fifteen REMs to which the population may be exposed without any abnormal change in their lives, or the lives of offspring which may be born in the future.

Since the beginning of time, man and animals have been taking on a load of approximately four and a half REMs in their lifetime and knowing nothing about it. This comes from what is known as "background radiation," or natural radiation.

Now we are conscious of radioactivity because of much publicity on the subject of atomic energy, nuclear fission and "radioactive fallout. Fallout subjects us to another onehalf REM in our entire lifetime at the present rate.

Since the principal source of other radiation to which we are exposed are X rays, let us explore the subject and see just what dangers lie in placing yourself before the X ray machine for examination.

To begin with, the greatest concern scientists hold for being exposed to radiation of any sort is the fact that your unborn children or grandchildren might be affected. If the reproductive organs are exposed to radiation there is a chance that offspring might be affected in two ways — by congenital malformation or by genetic mutation. The first could mean Siamese twins, cleft palate, hare lip, etc. The second means a change in the genes which pass on the characteristics of the parents to the children. Color of eyes and hair, build, intelligence and other such features are involved.

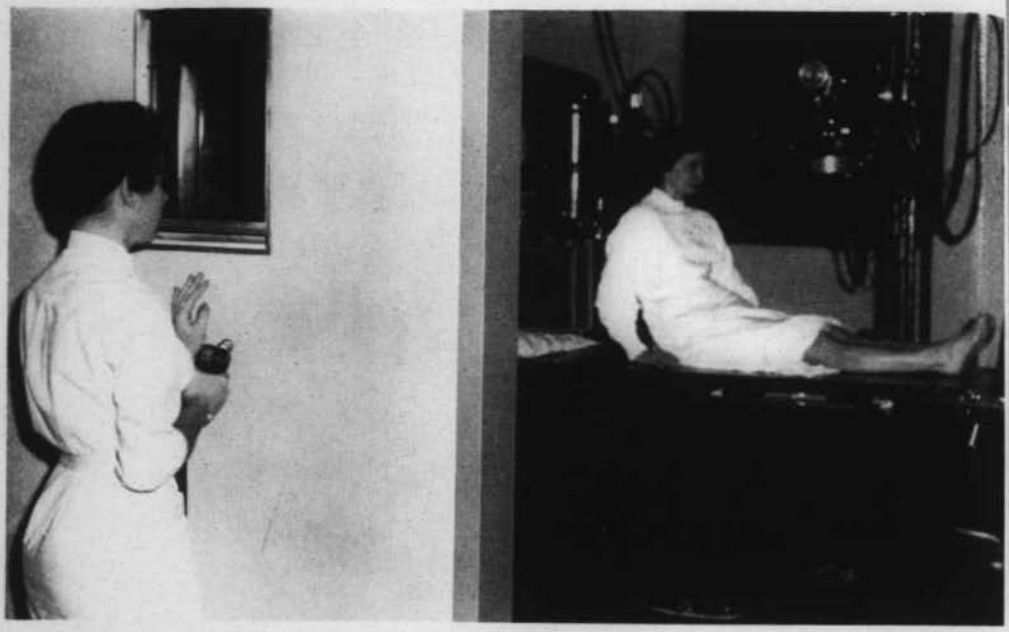
In our next consideration, let us remember that we have accounted for five of the fifteen REMS which scientists say we may accumulate before damage might occur.

The Question

Now let's see just how much radiation one may expect to receive from an X ray of the chest. To begin with, let's get one thing on record right now—the mobile X ray survey equipment used by the State Board of Health has been carefully shielded so that a minimum amount of radiation can ever reach the reproductive organs of the individual being exposed. It has been determined that the amount of exposure from such an X ray unit for one X ray picture is 0.0015 REM. Since we only receive that amount of radiation during one chest X ray of this type, it is clear that we could have 750 of them made and only receive one REM. And remember we are allowed ten REMS of such exposure during our lives. To get your permissible limit of such radiation you would have to have 7,500 such chest X rays. This is not very likely to happen.

Some people believe that X rays of the chest will cause lung cancer. After exhaustive studies, it has been found that the person who smokes one pack of cigarettes a day runs the risk of lung cancer calculated at 660 chances per million persons per year. The risk from smoking one pack a day is twice as great as the risk of developing lung cancer from a total body exposure of 250 REMS, or the equivalent of having your chest X rayed 18,750 times. The risk of accidental death from driving an automobile 10,000 miles a year is calculated at 640 chances per million persons per year, or the same chance you would have of developing leukemia from 9,275 chest X rays.

The principal thing to do is to get good X rays with minimum exposure. After all, if your doctor says you need an X ray for any reason, your fear should be for your personal health and not for the minute fraction of radiation you might receive in allowing the doctor to use this diagnostic tool which can mean so much to you in revealing your condition to him.



Here X ray is used to locate a possible knee fracture. The technician is protected by a leaded partition and leaded glass viewing window. An aperture in the lead shielding restricts the X ray beam to the approximate area of the picture. The patient could be further protected by a leaded rubber apron covering the rest of the body.

make the machine more efficient and less capable of "scattering" unneeded rays.

The proper location and shielding of an X ray machine is very important. The machine must be so placed that its rays do not penetrate into areas where they might do damage. In a physician's or dentist's office or in a hospital, care needs to be taken to see that rays do not go through the wall and into other places where people congregate. The arrangement of the machine in the room should be considered, and proper shielding must be provided if the machine points toward an area where people work or wait.

The fluoroscope, the X ray machine which looks directly "into" the patient without making a film, uses a relatively large amount of rays in its work. Patients will find generally that the fluoroscope is now being used only where in the doctor's opinion the benefit will outweigh the disadvantage.

There is one specific thing a person can do in the matter of protecting himself from this type radiation. Doctors and insurance companies have repeatedly said that with the advent of health insurance that pays for X rays, the patient often suggests, or even demands, that a series of X ray pictures be taken pictures

he might not insist upon if he had to pay for them out of his own pocket. The patient or his family should allow the doctor to use his own judgment as to the need for X rays.

Florida's Part

But there is a great deal more to the story than merely organizing a careful use of X rays. The federal government is preparing to turn over to the states the responsibility for protecting the public from radiation. The 1957 session of the Legislature created the Florida Nuclear Development Commission, to work closely with the Atomic Energy Commission at the federal level, and with other state agencies including the State Board of Health, in planning and preparing Florida to take the giant forward steps it must take in the atomic future. Of course the prime duty of this commission is to guide and direct the future use of atomic power within the state, but one of its major duties is to see that legislation rules and regulations are provided that will protect the public from the dangerous use of radioactive materials.

The State Board of Health last year changed the name of

ATOMIC DISASTER

This issue of *Health Notes* was designed to deal mainly with the bright rather than the dark side of the atomic picture. But common sense dictates that we recognize the existence of the atomic peril. Nations with opposing ideologies possess the power to obliterate each other. Atomic reactors can "run wild" and spread deadly radiation. It happened in England some years ago. Mechanical accidents in the use or transportation of atomic materials can happen, and error is always possible in human activities.

It is the feeling of Florida officials who know most about the problem that our people should give sober attention to the suggestions of the Civil Defense authorities and learn what to do in an emergency of this kind. Newspapers, magazines, radio and television are constantly reminding us what to expect in such a crisis. The details are familiar, and need not be repeated here. But the Florida State Board of Health firmly supports the efforts of the state's Civil Defense forces, and urges the public to do the same. Be informed—and be prepared—for something we all pray will never happen.

its Division of Industrial Hygiene to the Division of Radiological and Occupational Health. This division, within the Bureau of Preventable Diseases, will be charged with the responsibility of guarding the public, and as well as, workers in industries using atomic materials, reactors or isotopes, from the hazards and dangers of radiation. The division director is a physician with many years of experience with the United States Public Health Service and his staff is composed of trained, radiation physicists and technicians well qualified to carry out such duties.

It is the intention of this division to develop a system of registration of sources of man-made radiation within the state, including all X ray machines, radium, power plants, reactors and users of isotopes. Rules and regulations will be set up for the safest possible installation and use of all such equipment and materials. This will be done on a gradual "take-over" basis, as the federal agencies relinquish their controls to state agencies which meet the proper qualifications to handle the job.

The division will also work with the Bureau of Sanitary Engineering in preparing what we might call a "radiation map" of the whole state. This map will show the amount of natural radiation or fallout occurring in any given locality, and the amount of radioactivity to be found in all streams, lakes and wells. This "background" study can then be used in the future for comparison, and if any stream or land area begins to show an increased amount of radioactivity, an investigation can be made to determine and correct the source.

Air and water samples will also be taken regularly all over Florida, and a cumulative series of records will be kept to show the state's radiological history. This is already in effect on a limited scale, and it has been found that the air over north Florida decreased measurably in radioactivity after the testing of atomic devices was stopped in Nevada. However, the radioactivity from such "fall-out" never was great enough to cause alarm, the division says.

In all phases of public health, the State Board of Health has always regarded education of the public as a major consideration. So it is with this brand new problem of radiation. This issue of *Health Notes* is only one of the many ways in which educational activity will be carried on, so that the public, and the users of radioactive materials and machines, will be kept in touch with latest developments in Florida in this field.

A shellfish sanitarian collects shellfish to test them for radioactivity.

A geiger counter, left, and "cutie pie," center, are checked by an industrial hygienist. These two instruments are used in the field to measure radiation. At right, another hygienist is determining the radioactivity of a prepared shellfish sample by inserting it into a proportional counter.

Conclusion

In his earliest days, man cowered in whatever shelter he could find as fire raged through his forest. Then he learned to use it in controlled amounts, to cook his food and warm his home, to shape his metal and create the steam that powered his tools. Even today, though, intelligent people have a healthy respect for fire, and handle it sensibly, according to known rules.

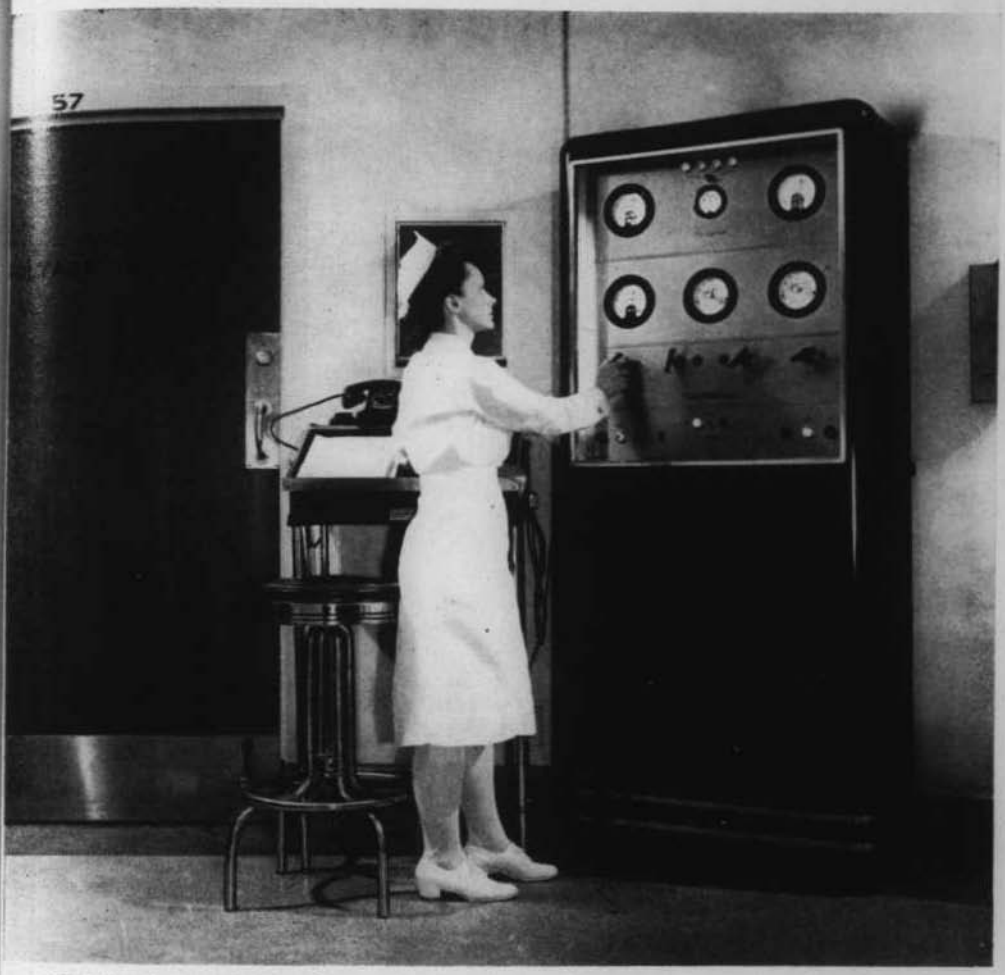
Scarcely more than a hundred years ago, electricity was "the fateful lightning of His terrible swift sword," or a laboratory curiosity. Today our children have toys which operate safely on this power. But again, we know it as a faithful servant which must be treated with firm respect.

So it must be, and will be, with the atom. Even now our world is filled with electronic gadgets which carry knowledge, and entertainment to the eyes and ears of the world. Yet its beginnings were made in the childhood of people still vigorous and very much alive. The scientists who made a "light like the sun" in the Nevada desert still have children in school.

Governor LeRoy Collins, members of the Legislature, the Nuclear Development Commission, and the physical scientists at our state universities have all spoken often of the almost unimaginable future that lies ahead of Florida in the field of atomic power. The heat and power that now come from coal and oil, carried from hundreds of miles away, will someday be created by handfuls of gray metal, shielded behind small mountains of lead and concrete. The vast fields that grow food for the nation the year round will blossom more brightly than ever with vegetables developed through isotope research. Industries, drawn to the Florida sunshine and freed of the need of swift flowing streams or train loads of coal and oil power, will spring up all over the state, providing jobs for our people, and tax money to run our government.

Florida will be a self-sufficient state, dependent on others for nothing but the metals that flow into her industries. No one can clearly imagine what the next few decades will bring forth. But we do know that the atom and its fantastic power to work and to detect, to diagnose and to heal, will play a leading role in this unfolding drama.

Where does the public stand in all this? On the sidelines for the most part—at present. Atomic powered cars and wrist TV sets still belong to Buck Rogers. But there is much we can and should do even now.



High-voltage radiation therapy is used for the treatment of cancer. A lead door into the therapy room, lead walls and a leaded glass viewing window protect this hospital technician from exposure. An interlock on the door automatically stops the machine when the door is opened. The therapy room must be shielded on all sides, top and bottom to protect other parts of the hospital. Those areas of the patient's body not being irradiated are protected by lead shielding.

ISOTOPE

A word of Greek derivation meaning "same place." An isotope is therefore one of two or more atoms occupying the same place in the table of the elements, but differing slightly in composition of protons, neutrons and electrons. When the atom contain an unbalanced number of these components it is considered unstable, and it emits or releases the unbalancing parts and is therefore "radioactive."

—We should remember not to insist on unneeded X rays.

—We should learn our proper roles in Civil Defense, finding out what to do in case of nuclear attack, and in event of other atomic emergency, such as the wreck of a railroad car or truck carrying atomic materials.

—We should familiarize ourselves with the symbol of radiation and teach our children to know and respect it.

—Finally, we should keep our minds wide open, with a healthy curiosity concerning the whole field of the atom and its uses.

IONIZING RADIATION

Io, the Wanderer, was a character in Greek mythology. The ion was named for her because an ion is a particle of matter or energy wandering free in nature, not attached to an atom. A stream of such ions is a ray—it radiates. It can strike an electron orbiting around the nucleus of an atom and set it free, thus changing the nature of that atom. The first particle has "ionized" the atom.

We acknowledge with thanks the permission of the Virginia State Department of Health to use the photographs published in this issue of Health Notes. The pictures are from a recent issue of that state's "Health Bulletin."

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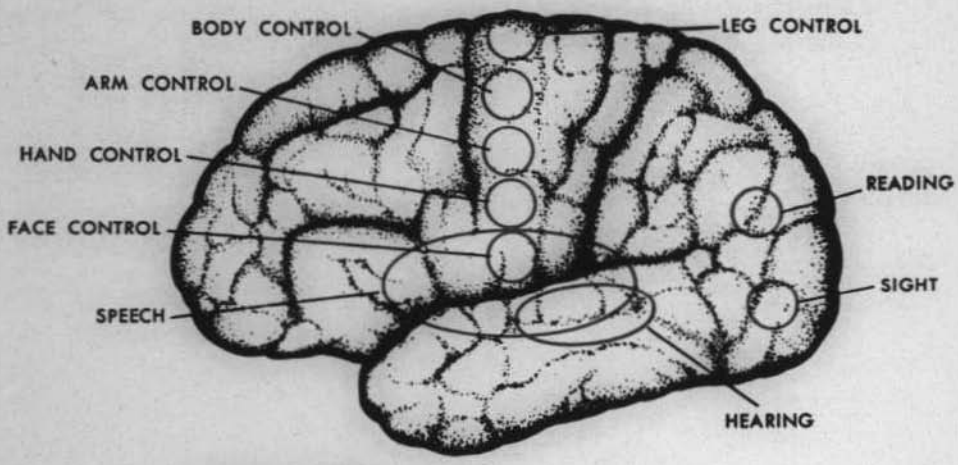
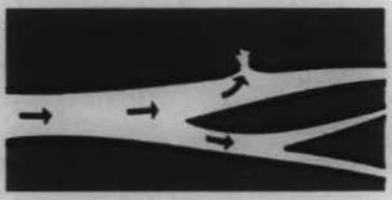
STROKE

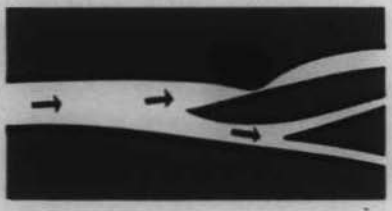


CONTROL ZONES OF THE CEREBRUM

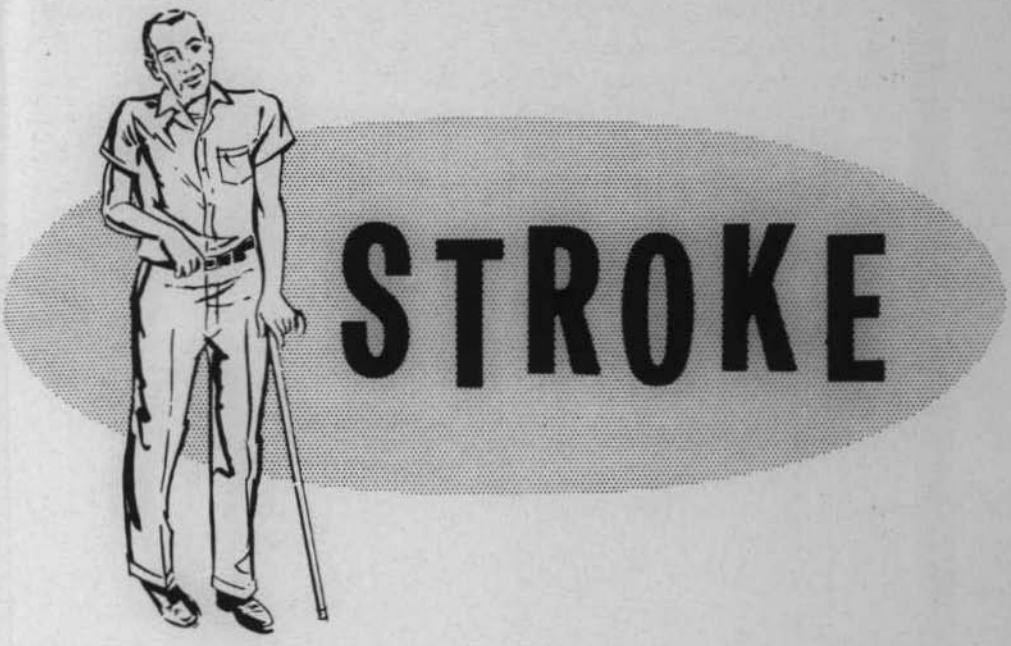
CLOTTING



HEMORRHAGE



COMPRESSION



It was the year 1915. As the children walked along Poplar Street on their way to school, they saw "old" Mr. Andrews (he was 50) being settled in a rocking chair on his front porch. His right arm was drawn up a little below his waistline. The fingers were drooped downward and under. His right leg looked almost normal except that the foot was turned inward and the toes seemed to try to point at the left heel all the time. He dragged that foot when he walked. Mrs. Andrews had fed and bathed him, dressed and shaved him before bringing him out where he could watch the world go by.

Mr. Andrews was a victim of a stroke. It was agreed by everyone that very little could be done for him so he was to live out many years being a "drain" on family and friends.

The year is 1960. In a house on the same street, a Mr. Thomas, age 55, has had a stroke. But he is not considered an incurable invalid. Already his physician, family, friends and employer are all interested in his rehabilitation. He is learning to feed and care for himself. He hopes to go back to work before long. He may yet become a useful member of society again.

But the stroke problem is a real one in Florida, in the United States and throughout the world. The exact size of the problem in all countries is not known, but in the United States we know that cerebro-vascular disease (disease of vessels of the brain) caused 192,980 deaths in 1958 and was listed as the third leading killer behind heart disease and cancer. Essentially the same situation was found in Florida in 1958. There were a total of 5,120 deaths as a result of cerebro-vascular disease which placed it as the third leading killer. This is significant evidence within itself to prove that this group of diseases is a big problem, but is it the whole story? No, it is not. To get a clearer picture of the size of this problem we must realize that today there are untold numbers of people, perhaps 1,800,000, who are suffering the ill effects of strokes. These people, often with alert minds, find themselves trapped in crippled and disabled bodies. As you might imagine, this can cause a tremendous amount of frustration to an affected person, for he now is no longer able to care for his needs, and in some cases for the needs of an entire family. He may now feel that he is a burden to the family or his friends and wish he were dead, for he feels everyone would be better off if this were true. If he is the breadwinner for a family or a woman is the mother of several growing children, the problem created for that family may also be quite depressing. We see then that the "stroke problem" is not just confined to the effects felt from all the deaths due to strokes but is to a large extent caused by those who must live for years with the crippling effects of this condition. More research, newer drugs, better surgery, etc., may give us the answer on how to prevent or care for strokes in the future, but the one big thing we focus attention on now is the rehabilitation of the stroke patient.

What is a stroke?

A stroke is probably best defined as the loss of function (temporary or permanent) of a part of the brain due to the cutting off of its blood supply. The effect of a stroke then depends upon which part of the brain loses its blood supply. For example, a person may find that he has difficulty in speaking and no other trouble if only the brain's

FLORIDA HEALTH NOTES

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speech area is involved. On the other hand a person may become almost completely paralyzed and die, if the bigger arteries are involved. A stroke then can either be very mild (so called "little strokes," where the difficulty in speaking, walking, remembering, etc., are gone within a short time) or very severe (causing unconsciousness and severe disability or death).

"Stroke" is just one of the names given this condition that affects the brain's blood supply. Another common term is "apoplexy," or "apoplectic stroke." Neither term tells us actually what has happened to the patient, for according to the dictionary a "stroke" is defined as; "an act of striking, or impact; a sudden attack of disease," and apoplexy means; "to cripple by a stroke." To be more specific then, most doctors use the term cerebro-vascular accident to describe the condition rather than stroke or apoplexy. "Cerebrovascular" refers to the vessels of the brain and "accident" describes in a general way what has happened to these vessels. Just what *has* happened requires a good history of the patient's illness and an equally good physical examination for there are many things which must be considered when making the diagnosis and determining the cause of the stroke.

What happens?

There are three main causes of strokes, (1) clotting of the blood, (2) rupture of a vessel with hemorrhage and (3) compression of a vessel so that the flow of blood is stopped.

Clotting: A blood clot can cause a stroke in several ways. First, it may form within a brain artery itself (this is known as cerebral thrombosis), or a clot may form somewhere else in the body, break away from its attachment and pass into an artery of the brain (this is called a cerebral embolus). Most clots causing strokes are formed within the brain itself and the most common condition known to cause this is atherosclerosis, a form of arteriosclerosis (arteriosclerosis is the condition where the arteries become thick, lose their elastic nature and become hardened). Atherosclerosis is an abnormal condition found in arteries where hard and soft, yellow, fat-like deposits are seen protruding beneath the inner wall of the vessel. A clot can be formed when these thickenings and protrusions become so large as to cause a stoppage of the blood or when one of these deposits ruptures at one end and peels up to form a barricade against the flow of blood (See inside front cover). Clots (emboli) coming to the brain from other parts of the body most

commonly come from the left side of the heart. These are usually seen following a severe attack or in cases when the heart has been badly damaged by rheumatic fever. Both conditions favor a clot formation within the heart. Figure 1 shows how an embolus might cause a block.

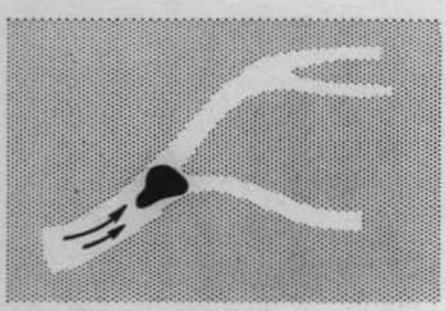


Figure 1
EMBOLUS

Hemorrhage: Generally the more severe and serious of strokes are caused by hemorrhage or bleeding from a diseased artery. (See inside front cover) Not only is damage done by interrupting the blood supply to the brain beyond the point of rupture, but the brain tissue that is filled with the free blood becomes injured also.

Conditions are best for rupture of a vessel when atherosclerosis and high blood pressure are both present but bleeding may also occur following a head injury or rupture of an aneurysm. (An aneurysm is an abnormal swelling or ballooning out of a vessel, which indicates that the particular vessel is weak at that point.) This defect may be likened to a weak spot in a tire's inner tube and is generally found to be congenital (born with). Figure 2 shows how one type of aneurysm looks. Aneurysms are responsible for a large number of strokes seen in young people and children.

Compression: This is the least common of all as a cause of stroke, for it is usually due to a swelling or growth of tissue next

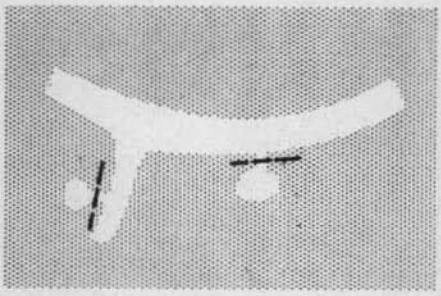


Figure 2
ANEURYSM

to a blood vessel. This swelling or growth (usually a tumor of some kind) pushes the vessel or kinks the vessel to such a degree that the flow of blood is stopped. This is illustrated in figure 3. Since brain tumors are rather rare we can see why this is one of the least common causes of stroke.

There are several minor causes of stroke which do not necessarily fall into any of the above categories. *Vascular spasm* simply means that the blood vessel through some unknown mechanism constricts or narrows at a certain point and stops the blood flow. It is believed that this "spasm" does not last long and the symptoms produced by it are short lived. Such a condition has often been called a "little stroke" and is but one of the ways that such can be produced.

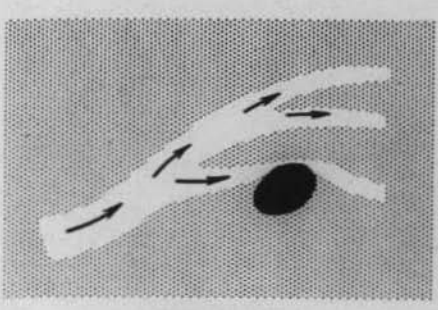


Figure 3
COMPRESSION

Hypotension or shock is produced when the blood pressure falls to abnormally low levels. Of course, there are many causes for this, but one of the more common ones is heart disease, often seen in the form of a heart attack. In this condition the blood flows so slowly through the brain that at some narrowed places in the vessels it may actually stop. This can cause damage to that part of the brain.

What to do . . .

Once a person has had a stroke there is no way known today of telling if and when he will have another. There may be a series of "little strokes" with little damage done. There may be several little ones and then a big one, or possibly a big one with no recurrence. However, through medical research into such conditions as atherosclerosis and high blood pressure some important advances have been and are being made in the treatment and prevention of strokes. Treatment and prevention of strokes are possibly best discussed under the following headings: (1) the use of drugs which prevent the blood from clotting (2) the use of drugs to lower the blood pressure (3) surgical removal of clots and (4) rehabilitation of the patient.

Drugs that prevent the blood from clotting are known as anticoagulants. Anticoagulants have been used for many years in the treatment of such things as heart attacks and thrombophlebitis (infected vein with clot formation). However, not until 5-10 years ago were they used to any extent in treating stroke patients. They can be used only in those cases where there has been no bleeding. It is very difficult at

times to know whether or not this has happened. It is for this reason that doctors are still very cautious about using anticoagulants. Research into the use of these drugs in stroke cases is still going on.

High blood pressure is associated with many cases of stroke and has often been given credit for causing it. This is particularly true of cases where there has been rupture and bleeding from the vessel. Since very powerful drugs have been developed in the past 10-15 years which in most cases can control high blood pressure, it is reasonable to believe that some strokes may actually be prevented or delayed in their development.

Surgery has been employed in special cases to remove the offending clot from the vessel. This is a fairly recent development but is being used more and more. However, such a procedure is restricted to cases where the clot is found in the big arteries (in the neck) that lead into the brain. Surgery of this type can be done only by surgeons trained in this field. The big arteries in the neck are used because these are the only vessels that can be fairly easily and safely reached. All other vessels carrying blood to the brain are enclosed within the bony vault of the skull and are embedded in the brain itself. Considerable work still needs to be done in this field. Surgery is also used in the cases where there is bleeding around the brain as a result of head injury or an aneurysm. It is often life saving in these instances.

The fourth category of treatment to be considered is early and comprehensive rehabilitation of the stroke victim. We want to devote considerable space to this aspect of treatment for it is here that so much can be done.

Rehabilitation

The amount of rehabilitation necessary for a given case of stroke depends, of course, on the degree of disability. Some people are only slightly affected by the stroke and recover quickly on their own. Some cases, however, require months of training to regain the ability to take care of daily needs or learn to walk again. These cases are too many and it is these people we need to help.

Ideally rehabilitation should be done by a "team" headed by the doctor in charge of the case or one who is a specialist in the field. Such a specialist is known as a physiatrist and should not be confused with a psychiatrist who treats mentally ill patients. This "team" is composed of people specially trained in the fields of speech therapy, physical therapy, occupational therapy, nursing,

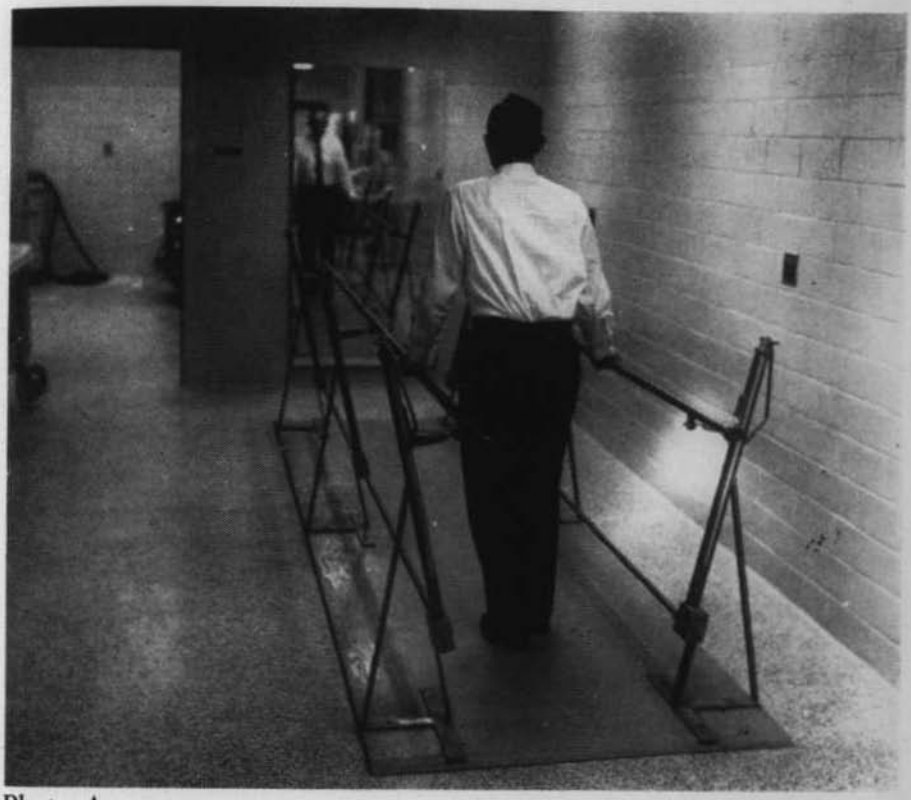
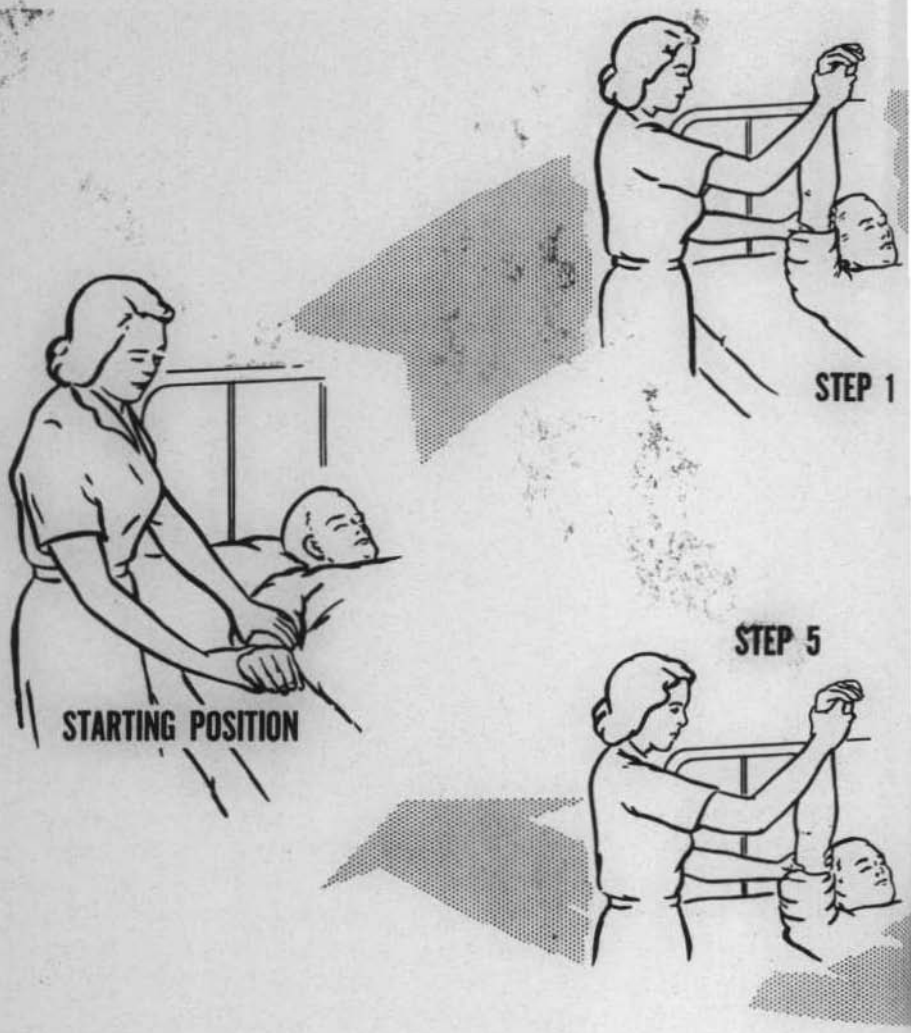


Photo A

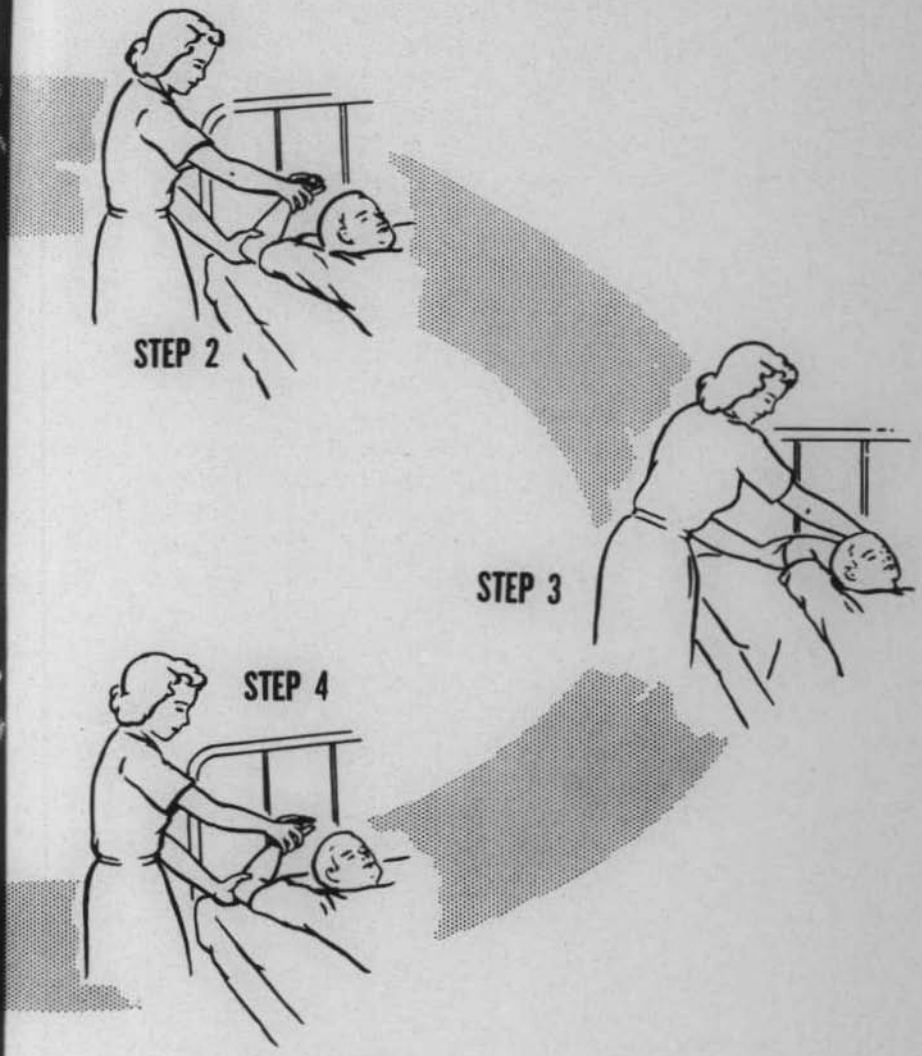
▸ *These parallel bars are used to teach the stroke patient how to walk again.*

vocational counseling, social work, religion, psychiatry, etc. Not every case will need the services of all these people, but some do. Such a team is easily assembled in the larger hospitals and rehabilitation centers. This is true of the rehabilitation center in Gainesville (at the University of Florida), where the most modern up-to-date equipment is also available. Patients here come from nearby hospital wards and from homes in the surrounding area. They represent not only cases of stroke, but those of polio, cerebral palsy, accidents, etc., as well. Photographs A, B, C, D and E show equipment used at Gainesville.

To properly present what rehabilitation is and how it works, we might best illustrate it with a case. Mr. X, a 46 year old man, has just experienced a stroke. As a result one side of his body is paralyzed. This condition is known as hemiplegia and is one of the most common conditions found in stroke. Figure 4 illustrates this disability fairly well. Note the way the leg is turned



This illustration shows one series of exercises for the arm taken from the USPHS booklet "STRIKE BACK AT STROKE." Step 1 shows how the arm is lifted from the side of the body. Step 2 shows how the arm is carried toward the patient's head as far as possible without hurting him. Step 3 shows how the arm may be bent at the elbow if the headboard gets in the way. In Steps 4 and 5 we see how the arm should be returned to the starting position.



EXERCISES ARE IMPORTANT (1) keep the patient's muscles from wasting and becoming weak, and (2) keep the joints in the feet, legs, hips, and arms from getting stiff. Exercises should be done the same number of times ON BOTH SIDES OF THE BODY so the good side will not become weakened during the long illness.

out and the arm and hand are contracted and brought across the chest.

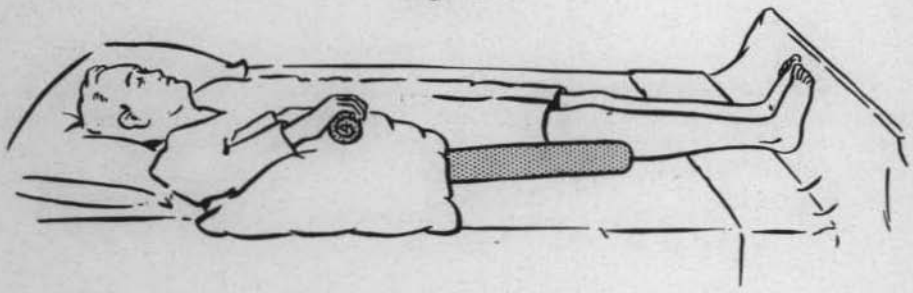
Figure 4

Mr. "X" is admitted to the hospital and the rehabilitation begins immediately. The first thing done, which will eventually mean so much to his recovery, is to properly position him in bed. Figure 5 illustrates one common position frequently used. One should note particularly the use of pillows and/or sandbags to support the affected arm and leg. Note also the footboard which supports the foot and keeps it from "drooping." If the foot is allowed to droop for long it will assume this position and the patient will later find walking very difficult. The sandbags or pillows serve essentially the same function as the footboard in that they prevent the arm and leg from developing contractions and deformities. Contractions and deformities begin to develop almost immediately if proper support of the affected limbs is not given. Adequate support of the crippled arm and leg and foot is required no matter what position the patient is in.

Next we would consider exercising Mr. X's crippled limbs so that their muscles will not become drawn and contracted. This is generally started within 24-48 hours after the stroke has occurred if the condition was not due to bleeding from a ruptured vessel. If rupture of a vessel had occurred, then these exercises would be delayed for ten days to two weeks.

At first these exercises are in the form of passive movements. This means that the patient's arm, hand, leg, etc., are either exercised by someone else or by the patient himself with his good

Figure 5



arm. Most cases require that someone else do these exercises for the first few days or week. In the hospital the physical therapist often performs these exercises but nurses or members of the family may be taught to do them. The illustration on page 94-95 shows one way the arm could be exercised. As the person regains his strength he should be encouraged to do these exercises by using his unaffected arm and thereby help himself to recover. This will also serve to occupy some of the time that he seems to have so much of at this stage of the game. He needs to feel that he is doing something to help himself recover.

Photo B

▸ *The pulley shown here lets the patient exercise his affected arm by raising and lowering it with his good arm.*

After 48 hours or so have elapsed and no bleeding is occurring, Mr. X must begin doing things for himself. Efforts are directed towards teaching him to take care of his daily needs, such as feeding himself, combing his hair, moving about in bed, sitting up and even walking. Of course, those things have to be tackled one at a time or only a few at a time but we should constantly stimulate him towards complete recovery. In cases where a patient is cooperative and has a definite desire to recover, sitting on the side of the bed can be accomplished in 4 or 5 days, standing within a week or so and walking shortly thereafter.

If Mr. X has a speech problem then a speech therapist should be brought in on the case within the first week. Nothing is more frustrating to the patient than being unable to make his wants known.

As our patient begins to regain some of his lost functions we may need to bring in an occupational therapist. Such a person can teach the patient how to use special devices which make it easier for him to do many necessary things. Photograph D pictures some of the gadgets frequently used by stroke patients. Information about how to secure devices like these can be secured by writing to the Arthritis and Rheumatism Foundation, Florida Chapter, 1206 Huntington Medical Building, Miami, Florida.

Through complete rehabilitation services like those outlined

Photo C

The bowl is fastened to the kitchen table with a suction cup so the mechanical egg beater can be used by the stroke patient's unaffected hand. In the other picture we see a combination knife and fork with which the patient can feed himself. These and many other clever devices have been originated to help the stroke patient rehabilitate himself.

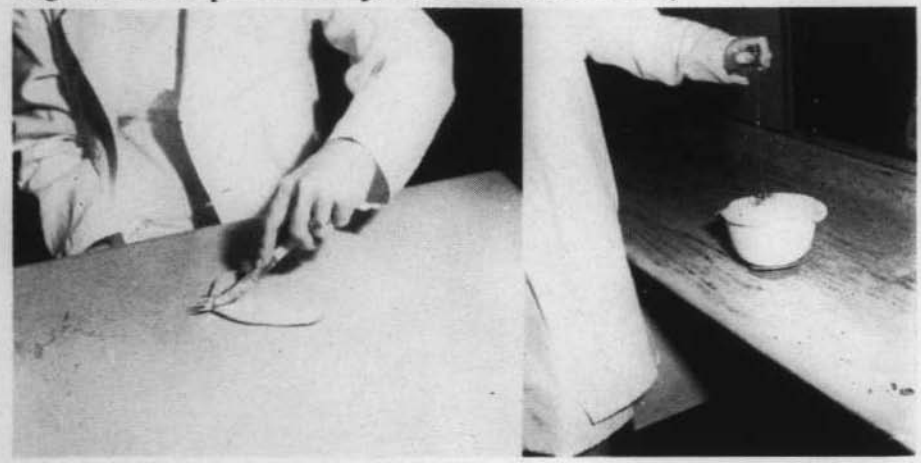


Photo D

▸*This little gadget is used by the stroke patient to button his clothes.*

above it is known that 75 - 90 per cent of stroke patients can be taught to walk again and 30 per cent can be returned to useful employment.

In Small Towns . . .

We have presented what can be done for the stroke patient who is cared for in a large hospital or rehabilitation center, but what about the large number of cases not reached by a team of "specialists?" They compose the majority of stroke patients and generally live in Florida's smaller communities and rural areas, reached only by their private doctors and the public health nurses. Does this mean that these stroke victims will have to do without rehabilitation care? No, they certainly will not, for such essential things as proper bed positioning, passive exercising of paralyzed limbs, etc., can be done by members of the family or the public health nurse if a little time is taken to learn the right procedures. The family physician can be of great help in arranging for instructions along these lines. Whether the rehabilitation is done in a modern medical center or at the home there is one very important point to remember — help the patient to develop a "will to recover." Every person who has anything to do with the patient's care should at all times show an optimistic attitude. This is especially

Photo E

The practice steps shown here aid the patient in re-learning the process of going up and down stairs.

true of the patient's family. The patient must feel he is needed even though crippled somewhat and that he is not just a burden around the necks of the ones he loves. The battle is half won if the stroke victim has the desire to live, to recover, and return to a useful life.

The Heart Disease Control Program of the State Board of Health is attempting to promote rehabilitation services to those people in the rural areas and smaller communities by each year sending several public health nurses away to be trained in the special field of rehabilitation nursing. To be sure this is not adequate to meet the need now existing, nor will it meet the need in the future. It would be ideal to have at least one public health nurse in each County Health Department who was well trained in the field of rehabilitation nursing. This is included in future program planning.

Physicians in the state who wished to know more about reha-

bilitation of the stroke patient have (upon request) received information on the subject. Most of this information was sent in the form of a booklet entitled "Strike Back at Stroke" which is published by the U.S. Public Health Service.

This booklet, designed to aid doctors in the rehabilitation of their stroke cases, is made up mostly of drawings that show how the stroke patient is to be positioned in bed, what the footboard looks like, how exercises of each arm and leg are done, etc., so that the doctor may use it to instruct a nurse or a member of the family host how to take care of the patient. It is very easy to follow and can be of great help to everyone concerned. The State Board of Health has sent at least one copy to each County Health Department. Your doctor may obtain a free copy by writing to the Heart Disease Control Program, Florida State Board of Health, Jacksonville. You might ask him to get one for you, too.

There are many areas in Florida that are fortunate in having rehabilitation services available. These services may be found in most of the larger hospitals (200 beds or more), but there are several large rehabilitation centers available at strategic points throughout the state. To obtain information concerning these centers and units consult your private physician or County Health Department.

Post-Script

All too frequently in the past, hemiplegic patients have been considered hopeless cripples and relegated to some chronic disease institution or the back bedroom, there to vegetate out their remaining years, bed-bound, helpless and a burden to themselves and to their families.

No longer is this attitude justifiable. Regardless of the extent of the disability, the hemiplegic patient can always be helped to a greater or lesser degree by a dynamic program of rehabilitation.

Those concerned with the care of the hemiplegic patient—the physician, the nurse, the physical, occupational and speech therapists and the members of the patient's family—must not shirk their responsibilities for bringing to the hemiplegic patient the best that the modern practice of medicine and rehabilitation has to offer.

Hemiplegic patients should be encouraged to keep active and do things for themselves; to wear their braces and do their exercises assiduously, and to be self-sufficient, not only in the performance of the activities of daily living but also, whenever possible, by doing productive work.

With proper management, the patient with hemiplegia can look forward with hope to years of useful life. The responsibility for this proper management rests with all the members of the treatment and rehabilitation team.

—"Management of The Patient With Hemiplegia"

FLORIDA STATE BOARD OF HEALTH

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JACKSONVILLE, FLORIDA

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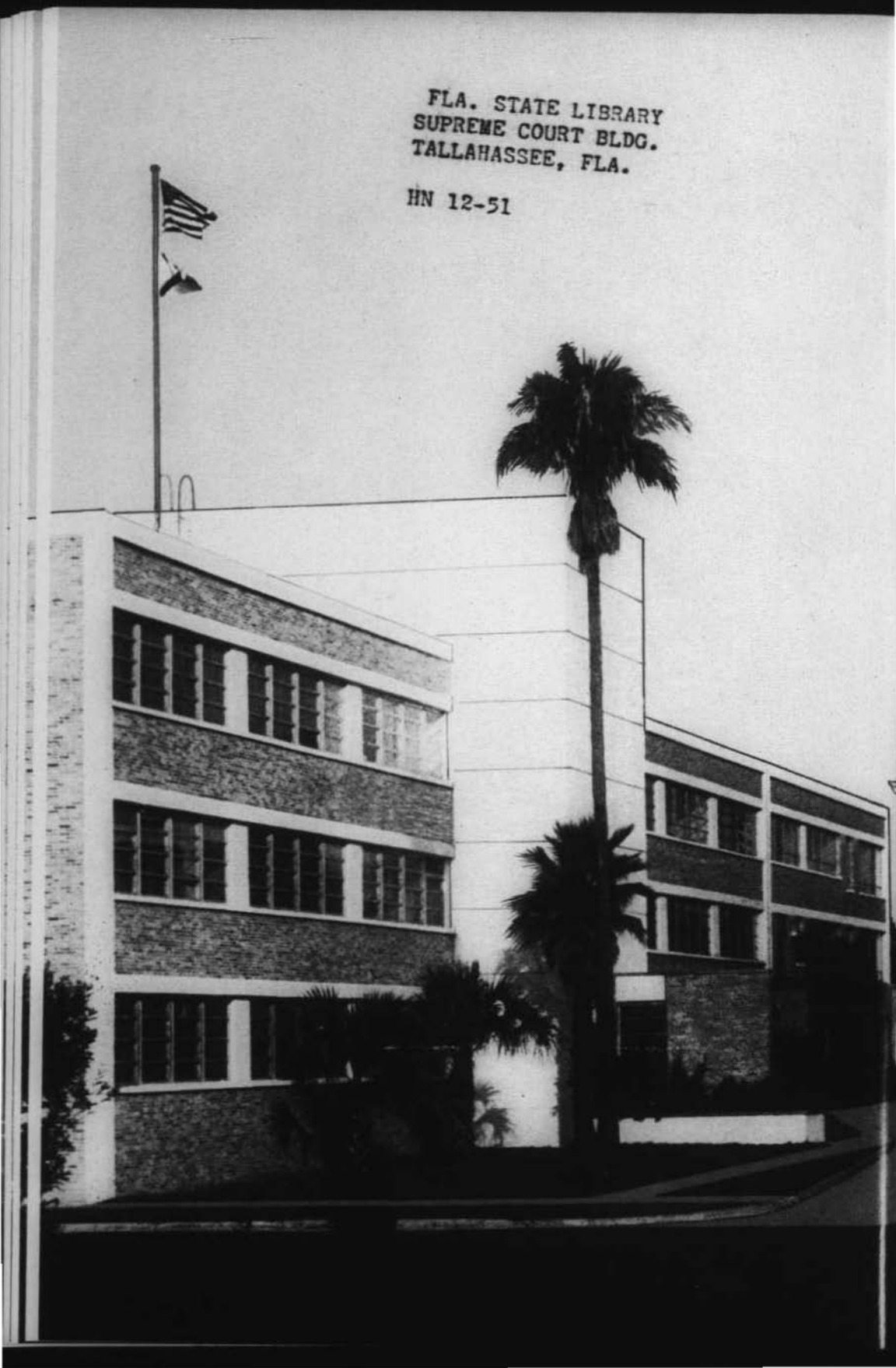
All Counties in Florida have organized county health departments, except St. Johns County

FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892



Florida HEALTH NOTES

VOLUME 52 • NO. 6
JUNE, 1960

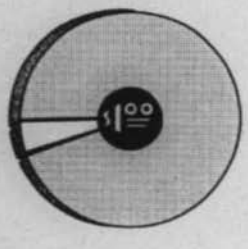
YEAR IN REVIEW-1959

THE PROPOSED BUDGET FOR FLORIDA STATE BOARD OF HEALTH DOLLAR FOR 1960

GENERAL PUBLIC HEALTH	$763,580	4.60¢
VITAL STATISTICS	200,152	1.22
HEALTH INFORMATION	84,372	.51
NARCOTICS	105,280	.63
SANITARY ENGINEERING	459,068	2.76
ENTOMOLOGY	2,060,472	12.41
TRAINING	219,500	1.32
LABORATORIES	585,205	3.53
PREVENTABLE DISEASES	628,119	3.78
SPECIAL HEALTH SERVICES	1,421,139	8.56
HOSPITALIZATION - PUBLIC ASSISTANCE RECIPIENTS	1,735,000	10.45
MATERNAL AND CHILD HEALTH	259,160	1.56
MENTAL HEALTH	342,868	2.07
LOCAL HEALTH SERVICE	294,455	1.77
COUNTY HEALTH UNITS	7,441,051	44.83
TOTAL	$16,599,421	ONE DOLLAR

THAT TIME OF YEAR IS HERE AGAIN.....

June is here—and so once again is the simplified version of the State Board of Health's 1959 Annual Report. Since you would probably not be interested in the lengthy official one, we have, as usual, put in some of the more interesting facts in this issue of *Health Notes*. For every fact you read, there were dozens left out. So use your imagination while you read and remember: The State Board of Health and the 66 County Health Departments' main job is to protect the public's health—whether or not you are aware of our daily efforts in your behalf.



THERE ARE TWO BOARDS

The *Board of Health* is a group of five persons, appointed by the Governor for four year terms, who set the policies of the *State Board of Health*. They serve without pay. In 1959 members of the Board were: Charles J. Collins, M.D., F. P. Meyer, D.D.S., T. M. Cumbie, Ph.G., John D. Milton, M.D. and Sullivan G. Bedell, M.D. Dr. Collins resigned during the year and was replaced by W. S. Horn, D.O. The Board met five times in 1959.

At the year's end there were 1987 employees in the State Board of Health and County Health Departments. This was an almost eight per cent increase—but not in ratio to Florida's increasing population.

Research is an integral part of good public health programs today. Over $300,000 was received in research grants during 1959. The oral polio vaccine trials in Dade County is one example of the above activity.

It is only right that you should be concerned with where the money comes from to operate the State Board of Health. Funds are received from:

State Appropriations and Funds	58%
Local Agencies for County Health Departments	31%
Federal Grants-In-Aid	8%
Research Grants	2%
Local Agencies for Hospital Service to the Indigents	1%

FLORIDA HEALTH NOTES

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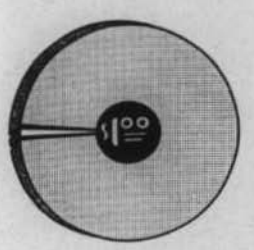


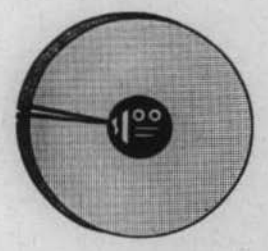
BEGINNING . . . END AND IN BETWEEN

The State Board of Health is responsible for the recording of births, stillbirths, deaths, marriages, annulments of marriage, divorces, legal changes of name and adoptions. These records are vital for both legal and statistical reasons.

In 1959 there were 215,624 certificates registered, an increase of 5.5 per cent over the preceding year. Copies of the certificates, when properly certified, may be issued to persons having a proper interest in the record. The issuance of these copies is a large-volume job. In 1959 a total of 107,272 requests for copies was processed —all within 24 hours of receipt of the request.

The population of the state was estimated to be 4,610,000, an increase of 3.6 per cent over 1958. There were 112,826 births and 44,162 deaths. The ten leading causes of death, in order of their importance, were: *heart disease, cerebral vascular disease, influenza, accidents, pneumonia, cancer, arteriosclerosis, birth defects, diabetes* and *suicides.*

In 1959 marriages increased 11.6 per cent over 1958 and divorces and annulments increased about the same rate as marriages.

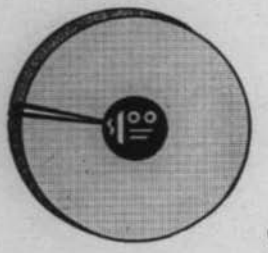


WE WANT TO KNOW

What is done about health education? Well, this publication, *Health Notes,* goes to approximately 14,000 people ten months every year. . . . The exhibits consultant held 50 planning conferences; he also turned out 300 other pieces of work (charts, maps,

etc.) . . . . The flood of requests for pamphlets never ceases: over 375,000 were distributed in 1959. . . . 76 press releases told the newspapers, radio and TV newscasters about the public health. . . . There is a slow but steady increase in the use of all audio-visual aids (which includes movies) with a beginning interest in filmstrips, tapes and slides. The number of aids circulated was 5803 —a four per cent increase over the previous year. A new electronically operated film inspection machine was purchased and a new booking order form was devised. . . . In the Library there are now 15,757 bound volumes. In 1959 a total of 2559 reference questions were answered, 1717 books and 8112 journals circulated. Interest was noted especially in radiological health, mental health, air pollution and sanitation.

Orientation programs are conducted for foreign visitors, student nurses, social welfare students and our own employees. . . . TV took a disproportionate amount of time and effort with three films and one live program telecast each month over an educational TV station in Jacksonville, WJCT. . . . There are now nine budgeted positions for health educators in County Health Departments. Several more will probably open up in 1960. This points up a major belief: that new public health programs in the future will be based on sound health education principles.



AS OLD AS TIME

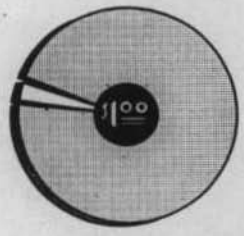
Although Florida has one of the lowest narcotics rates in the nation, constant surveillance and continued public education are needed to retain our favorable position. Officers of the Bureau of Narcotics made 214 arrests in 1959. (These are frequently made in cooperation with other law enforcement agencies.) As in 1958, the majority of these violators were nonwhite young adults living on the lower East Coast. For the first time in several years cocaine was found being imported illegally through the Port of Miami. The state remans comparatively free of heroin but marihuana continues to be the major problem.

The officers of the narcotics bureau made 80 talks to some 3000 persons. The talks were made before civic groups, PTAs, schools, universities, police training classes, nurses, pharmaceutical and medical groups.

Sixteen persons were committed for addiction last year, the majority of them being paregoric offenders. Arrests for other than narcotics violations totalled 46, an increase over last year (12 pharmacy, 3 medical and 31 barbiturate and amphetamine violations).

A major capture of illegal amphetamine drugs was made in the Miami District by the inspectors with a purchase of 50,000 amphetamine tablets. In addition 38,000 tablets were found in the defendant's car. Later 50,000 more were seized as contraband when the shipper was unable to deliver to the defendant.

In all categories, the state imposed heavier sentences and higher fines than in previous years. Over the years it has been proven that where convictions are the surest and sentences most severe, the narcotic violators are less prevalent than in places where he knows he can expect leniency.



WASTE AND WATER

At the year's end sewage collection systems were serving 50.5 per cent of the population and treatment plants built or approved will soon increase this total to 67 per cent. Drainage well permits numbering 263 were issued to permit disposal of waste water through underwater channels. Of these, 122 were for receiving waste water from closed air conditioning systems, 43 for lake level and surface control, 84 for drainage from swimming pools and 14 for other purposes. Only one city, Live Oak, is continuing to dispose of raw sewage by means of a drainage well.

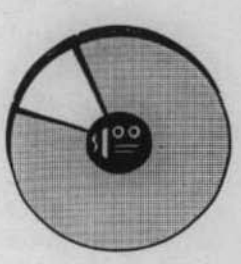
The plans for 948 water plant facilities were checked which included public water supplies for houses, industry and swimming

pools. Much of this was for expansion of present plants and indicates an increase of more than 139 million gallons per day added to present water supplies. Checking and testing of new wells continued with almost 20 per cent more new wells being approved in 1959 than were approved in 1958.

The famous oysters and other shellfish of Florida have to be protected from water pollution and other hazards to health. Oysters are packed and shipped by 62 dealers in the state. More than half of them deal in interstate commerce. A new Health Center and Marine Laboratory for the bacteriological examinations of shellfish and crustacea products and other seafood studies was set up in Apalachicola in 1960. This city commenced construction of adequate sewage treatment works which should reduce the pollution of adjacent bay waters and thereby permit increased shellfish production there. The following number of plants is an indication of the shellfish and crustacea activity in Florida: Oyster shucking and packing, 62; oyster shellstock only, 32; scallop shucking, 19; clam shucking, 7; crabmeat processing, 33; repacker, 8; shipper, 1. A total of 834 inspections were made, 14 new plants were constructed and 23 plants were remodeled.

Florida's Bedding Inspection Program is a progressive activity that advances from year to year by steady increases in revenues and consequent services rendered industry and the public. There were 4339 bedding firms registered with the State Board of Health at the end of 1959. A total of $50,800 was received from bedding stamps, a 25 per cent increase over the 1958 figure. There were 5109 inspections made with 9305 articles of bedding found in violation. Of the 466 samples of filling material laboratory tested approximately 20 per cent were found to be below the minimum standards. An educational program was continued with encouraging effects.

Plans for subdivisions, new trailer parks and other living installations were processed to see that they complied with the Sanitary Code, as were plans for new municipal and private sewerage systems; swimming pools were checked and water tested; bathing beaches and other natural bathing places were inspected and water pollution checks made in various places about the state. A stream sanitation laboratory was established at Winter Haven.



BUGS—BUGS—BUGS

Since mosquitoes, dogflies and other types of pestiferous insects could make life unbearable without constant attention to destruction of their breeding places and the killing off of the adults, the State Board of Health administers considerable funds set aside for this purpose.

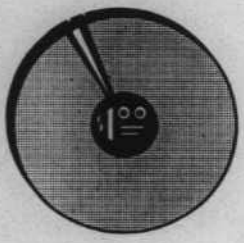
In addition, the Structural Pest Control Act places additional responsibilities on the agency. This includes the licensing of pest control operators and investigation of complaints from citizens.

There are five regional entomologists in the state. Their duties consist of working with County Health Departments and the mosquito control district offices to make life more comfortable for all of us—residents and tourists. Through the use of airplanes, fogging machines, draglines, bulldozers and manual labor the places where mosquitoes are known to breed are either impounded or drained to destroy them. The planes and the fogging machines are constantly placing poisons over vast areas to kill the adults. Paris green pellets which kill mosquito larvae and have no effect on human beings, fish or plant life are placed in many areas of the state each year.

Instruments and traps are used to determine the population of these pests and the control measures used are based on the findings of the traps. There has been no definitely proven case of malaria originating in Florida since 1948.

The Entomological Research Center in Vero Beach is spending endless hours studying the life and habits of not only the mosquito but other pests. This Center is unique and from its studies have come glimpses into future methods of control which will someday be put into practice.

In 1959 there were 529 miles of ditching performed, 28 miles of dikes constructed, 906,300 yards of hydraulic dredging, 205 cisterns, cesspools, wells, etc., filled, 519 drainage holes blasted and 63 landfills for garbage disposal operated.



A NEVER ENDING SEARCH

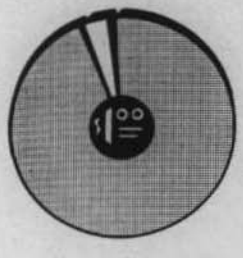
There are many ways of keeping our employees in the State Board of Health and the County Health Departments up-to-date with advances in the science of public health. Meetings, seminars, workshops, conventions, orientation programs—to name just a few. But probably one of the most effective methods is to offer scholarships to employees who have been with us for sometime and who show that with additional study they will be even greater assets to Florida's health. In 1959 there were 11 employees who received postgraduate training in a variety of colleges, universities and schools of public health.

We are concerned with the need for physicians and dentists in Florida's rural areas. Therefore each year scholarships in medicine and dentistry are awarded—to be repaid by a period of compensatory practice in an area that is in need of their services. In 1959 there were 11 new medical scholarships awarded (with 29 previously awarded continued); 10 dental scholarships (with 32 previously awarded continued).

The State Board of Health also administers scholarships, upon the recommendation of the Florida Council on Training and Research in Mental Health, to train psychiatrists, psychologists, psychiatric nurses and social workers. A total of 37 such scholarships were awarded in 1959.

Twenty-three newly employed sanitarians were given an intensive course of training in Jacksonville at the State Board of Health. Two months of this course consists of academic training and the other month is spent in the field.

One of the most popular activities is our Orientation Program. In 1959 four classes were conducted for our own personnel (both State Board of Health and County Health Departments) plus persons from state universities and guests from some of the health agencies. Approximately 200 persons attended.



DETECTIVE STORY

The laboratories of the State Board of Health have the basic responsibility of examining specimens to learn what disease or condition a person may have. Every day the mail brings hundreds of specimens, ranging from blood samples for marriage license examination to animal heads to be searched for possible rabies infection. Testing for polio, influenza, tuberculosis and other viral and bacterial diseases is a never-ending process. The war on intestinal parasites, such as hookworms, pinworms, whipworms and others goes on unceasingly. Milk and water testing are vitally important to the protection of public health.

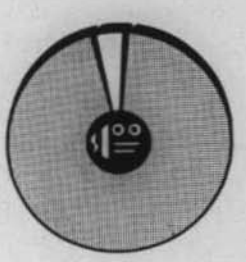
The following table gives an idea as to the services the laboratories performed last year. They increased by one-third over 1958 and represent work done in our public health laboratories in Jacksonville, Miami, Tampa, Pensacola, Tallahassee, Orlando, West Palm Beach, Daytona Beach and St. Petersburg.

SEROLOGY	
Syphilis	1,347,200
Agglutinated & Related Tests	5,103
Blood Typing (Rh)	16,953
DIAGNOSTIC BACTERIOLOGY	
Diphtheria & Associated Infections	9,963
Tuberculosis	116,750
G.C.—Smear	88,754
Culture	23,932
Enteric	222,336
Blood Culture	1,992
Leptospirosis	549
Miscellaneous	92,866
SANITARY BACTERIOLOGY	
Dairy Products	186,234
Water, Drinking & Pools	162,544

Pollution Surveys	32,015
Foods (Sanitary Quality Tests)	4,417
Food Poisoning	3,542
Utensils	2,784
DENTAL CARIES BACTERIOLOGY	3,466
PARASITOLOGY	
Intestinal Parasites	123,984
Malaria	276
MYCOLOGY	12,408
CHEMISTRY	
Blood	28,929
Spinal Fluid	4,110
Urine	529
Toxicology	999
Water	3,749
Other	13,105
VETERINARY PUBLIC HEALTH	
Leptospirosis	7,940
Other	2,539
VIRAL & RICKETTSIAL DIAGNOSTIC SERVICES	
Serology-Neutralizations	1,547
Complement Fixation	29,684
Isolations (except rabies)	13,586
Rabies—Microscopic	3,728
Mouse Inoculation	1,753
SPECIAL PROJECTS	
Salmonella Typing	2,592
Rabies—Fluorescent Antibody	665
Wild Animal Survey (Including Bats)	1,428
Monkey Viral Studies	4,207
Staph Phage Typing	59,900
Staphylococcal Studies	2,456
Urine Count	2,600
Evaluation of Media	737
Tuberculosis—aerosol	2,964
Diarrheal Disease Studies	6,451

In addition, there were some special studies undertaken by the laboratories. For example: the testing of a new method providing a faster means of detecting rabies was continued from 1958. Using what are called fluorescent antibodies whereby specimens of animal

brain tissue are stained with a fluorescent material and then observed with ultra-violet light in a special microscope arrangement, it is now possible to detect rabies virus in a matter of about seven hours rather than the established testing method of using mice, which requires 7 to 21 days.



o o o o o o THEY'RE STILL CATCHING

The communicable diseases are still with us.

There were 83 cases of diphtheria reported in 1959 with four deaths. Investigation revealed that 20 of 23 cases in one particular outbreak had never been immunized against this disease.

Infectious hepatitis (sometimes incorrectly called yellow jaundice) has steadily increased since 1956. There were 342 persons reported with this disease in 1959. Research has shown that this virus is probably transmitted person-to-person. The majority of the above cases were confined to four counties: Broward, Duval, Hillsborough, Manatee.

It is significant that the number of non-paralytic polio cases dropped from 155 to 65 in 1959 but the number of paralytic cases increased (from 97 to 132). Aseptic meningitis, formerly reported as polio, showed a sharp decline of 59 per cent.

There was an outbreak of viral encephalitis in Pinellas County with 72 cases being reported. To locate the source of the disease and the carrier, a study of birds and domestic and wild animals of the area was conducted but no trace of the disease was found among them. Attempts to locate the virus in human stool, brain and spinal fluid was unsuccessful.

Among other diseases there were reported 28 cases of typhoid fever, 4 typhus fever, 2 malaria, 5 brucellosis (undulant fever) and 1 person with Hansen's disease (leprosy).

There was a significant increase in the number of syphilis cases (30 per cent) and a smaller increase in gonorrhea (13 per cent). In the belief that better public education will help stem the tide

of venereal disease infection a Negro health educator was employed to carry the story of these diseases to school teachers.

It is a happy circumstance that tuberculosis is still declining. In 1958, there were 2085 new cases reported; in 1959, only 1588. After 21 years of operation the Central Florida Tuberculosis Hospital in Orlando was closed. Only the hospitals at Tallahassee, Tampa and Lantana are now needed to serve the tuberculosis patients of Florida. New drugs now make it possible to release patients much faster than before and to turn over their follow-up treatment to the County Health Departments. The number of X ray surveys were cut down somewhat during the year but there was increased use of skin-testing of children. This is usually called tuberculin testing and helps to locate adults with tuberculosis with whom the children may have had contact. In Palm Beach County, 33 persons were found to have tuberculosis as a result of 21,915 children tested (first and second grade students).

Rabies continued to decline among animals. There were no human cases or deaths. However, 448 people received the Pasteur treatment although only 32 were actually proved by later laboratory analysis to have been exposed to rabies.

Sixty-one sanitarians in various County Health Departments made 9500 inspections of dairy farms and 2300 milk plant inspections to insure the safety of the milk we drink. There were 35,309 milk samples sent to the laboratories where 198,814 bacteriological and chemical tests were made.

Samples of air and rain water were tested to see if they contained contaminants or radioactive particles. Tests were also made to determine the presence of carbon dioxide, airborne dust, acrid fumes—even the air a skin diver was breathing when he met with a fatal accident. The State Board of Health is concerned with problems of industry; for example: a manufacturer of fiberglass boats wanted to know about the airborne dust in his plant; a brewery, where the workers were exposed to heavy concentrations of carbon dioxide, was inspected; the operator of a citrus industry requested a survey.

HOSPITALS—HOMES

At the end of 1959 the State Board of Health had completed 30 month's experience administering the state's first *mandatory* hospital licensing law. The last 12 months of this period showed marked progress. During the year some standards were elevated and some licensing requirements were clarified.

The staff was kept busy throughout the year evaluating the hospitals of the state and serving as consultants in assisting them to correct undesirable situations where they existed. The following figures indicate some of the 1959 activities of the Hospital Licensure Program.

HOSPITAL EVALUATION ACTIVITIES, 1959

Hospitals and related institutions surveyed		181
Institutions found ineligible for classification as hospitals	6	
Institutions which voluntarily ceased operation in 1959	4	—10
		171
Hospitals licensed in 1959		—146
Hospitals remaining to be licensed as of December 3, 1959		25

The 25 unlicensed hospitals have been placed in a "license-deferred" status pending corrections and improvements to be made during 1960. It is anticipated that all of them will qualify at that time for licensure.

Continued emphasis was placed on the value of education designed to promote self-improvement within the *nursing homes.* Florida continues to have an increasing number of nursing and special care homes for the aged.

NURSING HOME EVALUATION ACTIVITIES, 1959

Nursing homes and related institutions evaluated	359
Homes that voluntarily ceased operation or were not licensed	32
Homes licensed	327
Total licensed bed capacity	8815

The State Board of Health publishes a bulletin "Living in Later Years" bi-monthly. It is circulated primarily to nursing home operators.

* * * *

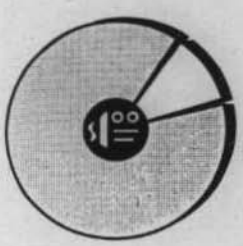
CHRONIC DISEASES

There are an estimated 23,000 people in Florida who have *diabetes* and do not know it. A continuing search goes on for them by way of community blood testing programs. Since it has been found that diabetes is more likely to be found among the relatives of known diabetics a search was made among some of these people. Of 648 tests made 20 probable new diabetics were found.

Insulin was supplied to 2741 diabetics in 1959, at a cost of $37,583.82. This was about half the insulin needed for medically indigent persons.

There are 21 tumor clinics in Florida aiming their efforts at the early discovery and treatment of *cancer*. Preliminary figures show there were 7219 cancer-caused deaths in 1959, an increase over 1958. One of the big problems is to get people to go for a checkup before the magligancy can become so difficult that treatment is practically useless. This can only be done through education of the public.

Heart disease is the leading cause of death in the United States and Florida today. In 1958 it was responsible for slightly over 35 per cent of all deaths in the state. Efforts are being made to educate the public concerning heart conditions and the need for proper rehabilitation after suffering a stroke or other forms of heart-related diseases that do not kill, only disable.



HOSPITAL SERVICE FOR THE INDIGENT

This is a major duty of the State Board of Health. There are those among us who are not able to pay for hospitalization and the state and counties have joined together to provide hospital services for them. This is a joint operation with the State Department of Public Welfare and provides services for the acutely ill or injured.

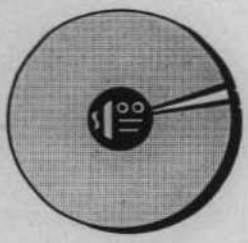
SUMMARY OF EXPENDITURES AND HOSPITALIZATION PROVIDED, JULY 1, 1958 - DECEMBER 31, 1958

Expenditures for hospital care	$2,015,700.25*
State funds	915,221.70
County funds	100,478.55
Average cost per admission	204.43
Average cost per patient day	20.53
Admissions	9,860
Number of patient days rendered	98,186
Average length of stay in hospital	9.96

*Does not include direct payments to participating hospitals for:

426 Non-Resident Indigent Patients	$42,502.70
64 Indigent Indian Patients	7,929.14

NOTE: All figures above are for only 6 months of fiscal year 1959 (July 1, 1958 - December 31, 1958).



MOTHERS AND CHILDREN

In 1949 the birth rate was 21.5 and the infant death rate was 43.3 (per 1000 population). In 1959 the birth rate went up to 24.5 and the infant death rate went down to 31.8. Most of the decrease in infant mortality comes from better control of infectious disease. However, the following figures (for 1958) give food for thought:

Certain Communicable Diseases in Children under 15

Disease	*Cases Reported*	*Deaths*
Diphtheria	54	3
Dysentery—A & B	188	6
Gonorrhea	236	0
Infectious Hepatitis	88	2
Meningococcus M	70	17
Salmonellosis	82	0
Tetanus	20	10
Tuberculosis—active	59	9
Typhoid Fever	9	0
Measles	12,514	12
Chicken Pox	not available	3
Mumps	2,702	1
Polio	161	1

Among nonreportable diseases for the year (1958) selected ones are shown for deaths only among children under 15:

	Deaths
Heart Disease	28
Congenital Malformations	477
Certain Diseases of Early Infancy (including prematurity)	2034
Accidents (excluding motor vehicle)	397
Malignant Neoplasms	72

Maternal deaths are at the lowest level in our history of record-keeping with 57 in 1959. This low figure is related to the fact that 93 per cent of all births took place in hospitals. Midwives however attended some 7000 births in homes in 1959.

SOME NEW TRENDS IN LOCAL PUBLIC HEALTH PROGRAMS

Perhaps the most obvious of new trends is the increased interest in public health research at the community level, and in demonstration projects with research implications. At least 15 projects and studies were underway in various counties during the year. . . .

Newer case-finding techniques are beginning to be used. Skintesting for tuberculosis was used in 64 counties; in at least 8 of these there were mass programs carried out on selected groups. The relatives of known diabetics were screened for diabetes in 11 counties. . . .

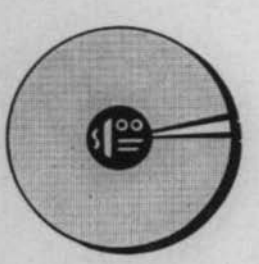
A number of counties are developing comprehensive plans for drainage, sewerage, water and zoning. . . .

The Red Cross Gray Ladies are well known for their volunteer work in hospitals. In 1959 they were assisting in the health departments and schools as well. . . .

Over the state, County Health Department activities show an increase in both quantity and quality over last year. There appears to be a steady increase in personnel and in the flexibility necessary for continued progress, although in many areas programs are not changing or — expanding quickly enough to meet present and future needs. Greater attention is being given to long range planning and community organization. It seems certain that the Florida public health public program will continue to be as dynamic in the future as its has been in the past.

More attention is being given to mental retardation. Of the 108,014 babies born in 1958 it is an educated guess that about three per cent, or 3300, were mentally retarded. Mortality figures indicate that not over 1600 of these died during the year. Thus at least 1700 mentally retarded children were added to the group that are already living. Of these 1700 it is estimated that 340 are sufficiently retarded to require their being put into an institution. Subtract this figure from 1700 and that leaves 1360 mentally retarded children requiring special education and services in our communities. In order to help with this problem, two-day training and orientation programs are being held at Sunland Training Center in Gainesville for health, welfare and educational personnel. The Developmental Evaluation Clinic, Miami, is now in its second year. This clinic accepts pre-school children suspected of mental deficiencies. The clinic's first report showed that 22 per cent of the children referred to it had intelligence ratings in the normal range.

The Migrant Project (Health Services for Migratory Agricultural Workers) is now in its third year. The public health workers' approach has resulted in several new service programs being offered. Chief among them is a low-cost maternity care plan. The sanitarian's study and report of housing conditions was helpful in the preparation and passage of a law in the 1959 Legislature which requires that all camps for these workers must be licensed.



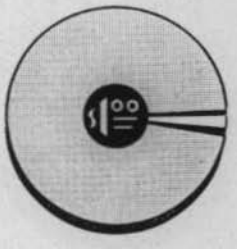
A HEALTHY MIND

Mental illness continues to be a major public health problem in Florida. It is estimated that approximately 45,000 persons in the state are seriously incapacitated with mental and emotional illness and over 200,000 need the services of a psychiatrist or psychiatric facility. It is conservatively estimated that mental illness costs the state over $98,000,000 each year, or approximately $22 per person.

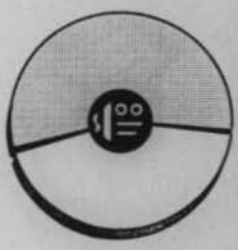
Florida now has 16 full time mental health clinics. They are often called child guidance clinics. Last year they saw approximately 7,000 persons. Some of their illnesses fell into the following categories: personality disorders, mental defects and emotional disturbances.

To date, 22 mental health workers have been placed in the County Health Departments. They work with the mental illness problems in the community and assist with the educational phase of the program. Juvenile judges and teachers come to know them well, as do the public health nurses and families of potential or returned patients. This program is unique in Florida.

Patients returning from state mental institutions are visited by the mental health worker or public health nurse from County Health Departments in 38 counties. Office and field visits were made in 1959 to nearly 2000 patients on furlough or trial visit from a mental institution. It takes a lot of time, counselling and patience to help some returned patients become adjusted to the community again: live at home and hold a job.



GRASS ROOTS



By far the largest part of the health dollar goes to the support of your County Health Department. In 1959, $7,640,156 was spent for this purpose. On December 31, 1959, there were 1,372 employees on the payrolls of the 66 County Health Departments.

The number of public health nurses employed in all County

Health Departments increased from 503 at the end of 1958 to 541 at the end of 1959. The nurses perform many duties in caring for the public's health. Visits to homes and schools, working in health department clinics, attending meetings—these are just a part of each day's work.

The number of sanitarians employed increased from 277 in 1958 to 304 in 1959. Of the many sanitation programs the greatest increase in activity was shown in the field of water supply and sewage disposal because of increased population. . . Twenty sanitarians from 15 Florida counties received intensive inservice training for 12 weeks.

The dental health program in the counties has been greatly stimulated by the employment of eight young dentists who recently graduated from dental school. . . . There are now five localities where bedside nursing care is included as a part of the duties of the public health nurse. This will be extended into other areas in the future. . . . There has been a sharp decrease in midwives in Florida in the past ten years from 439 in 1949 to 238 in 1959. . . . Thirty-nine County Health Departments are now housed in recently built or remodeled quarters. In 1959 the following counties erected health department buildings: Franklin, Washington, Sarasota, Broward, Auxiliary centers were built at Lake Wales and Haines City in Polk County and at Pompano in Broward.

Nutrition service were varied in 1959. In schools 41 group conferences and 66 individual ones were held; 50 classes and 30 talks were given to a total attendance of 4262. Classes were also held for diabetics, heart patients and overweight persons with a total attendance of 1737. Much assistance was given to small hospitals, nursing homes and child caring facilities in buying and in preparing attractive, economical well-balanced meals. Sixty-one counties were visited by the four regional nutrition consultants. There were many requests for assistance in community groups; many for weight control; and food fads.

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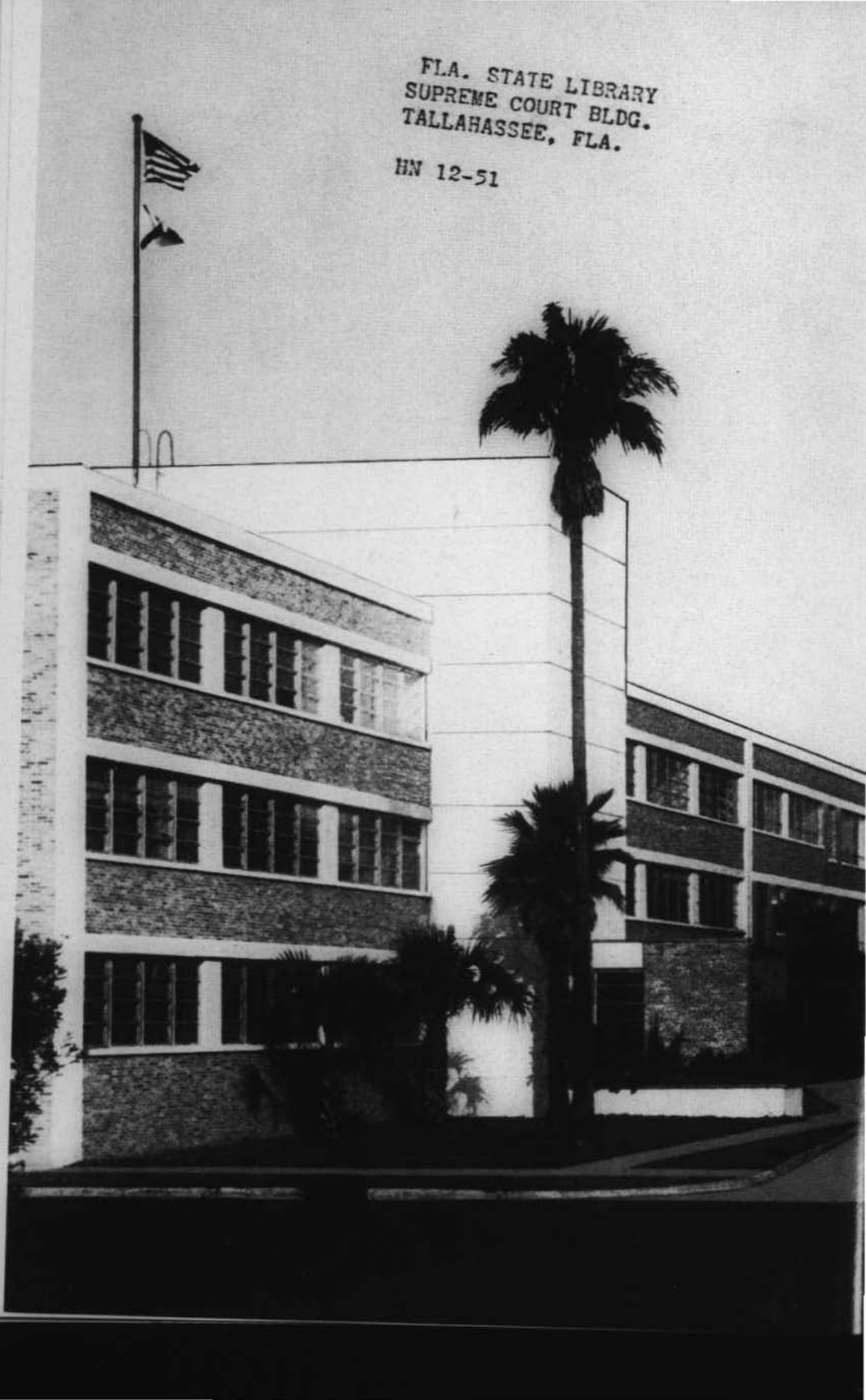
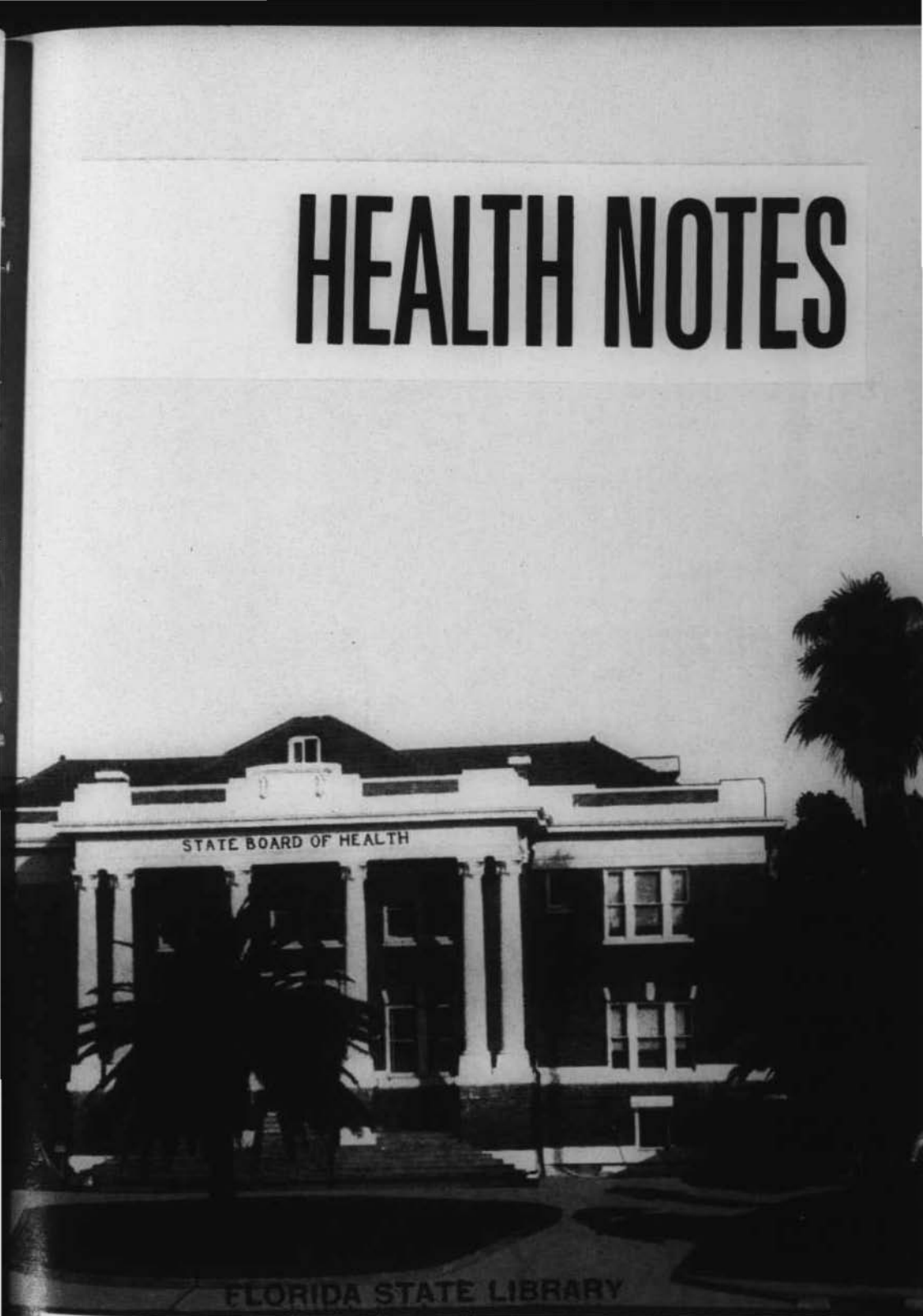
All Counties in Florida have organized county health departments, except St. Johns County

FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892



HEALTH NOTES



VOLUME 52 - NO. 7
SEPTEMBER, 1960

FOOD FADS

BASIC FOUR

DAIRY FOODS

MEAT GROUPS

VEGETABLES
FRUITS

BREAD
CEREALS

FOOD FADS

"Ten million Americans are bilked of $500,000,000 a year by nutrition nonsense—and endangering their health at the same time."
. . . American Medical Association

"The most widespread quackery today is in the field of nutrition."
. . . Federal Food and Drug Administration

"The problem of food and drug frauds through the mail is so big it scares us green."
. . . United States Post Office

The problem so clearly stated above faces the people of Florida every day. Food—what foods to buy, how to prepare them, and how they will affect the health of the family—consumes a large proportion of the time and thought of the Florida housewife. Food advertising and promotion, whether thoroughly ethical or strongly slanted in favor of some special interest group, take up a large part of the space in her magazines and newspapers and the time on her radio and television programs. She is literally besieged with articles, speeches, jingles and cleverly worded commands to "eat more *this*" and "serve more *that*." She is warned, advised, cajoled and tempted. She is informed, misinformed, wheedled and harried, by all the mass advertising media and by direct contact.

FLORIDA HEALTH NOTES

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Most of what she hears and reads is either straight truth or only slightly slanted in favor of the cereal interests, the dairy group, the meat packers, or some other highly reputable food. But in all this bewildering mass of material is an alarming amount of sheer popycock—some dangerous, some medically harmless but frightfully expensive, and some just plain silly. Even the least harmful of this quackery has a tendency to throw family nutrition "off the beam," drain resources unnecessarily, and delay contact with sources of legitimate nutritional or medical advice. This is especially true in the matter of dieting and weight reduction.

One of the major tools of the faddist is the "free health lecture," well advertised, in which one or more skilled speakers, usually carrying an impressive string of degrees after their names, harangue an audience with a mixture of half-truths, warnings, sarcasm, jokes and other tactics of the showman to put across their ideas. They invariably want to sell a book, a product, or both and they are also invariably "off the beam" nutrition-wise. At their worst they can do great harm by getting people to try their method of "cure" for serious diseases instead of obtaining needed medical care. At their best, they put an unneeded dent in the family budget.

Food faddism shows up most frequently in the field of weight reducing diets, while the more serious and harmful quackery concerns itself with worthless "cures" for serious chronic disease. Sincere medical and

If "overeating" is a term you don't like to use, try "hyperphagia." It's the medical term for the same thing.

nutrition people can shrug their shoulders at some of the least harmful reducing diets suggested by the popular magazines, but they get fighting mad at the quack—the criminal—who tells his victims that a certain food supplement will cure cancer or diabetes.

In between these two extremes are the mistaken, deluded or greedy promoters who tell us our soil is depleted and raises poor crops, our aluminum utensils are poisoning us, we can "eat all we want" while "dieting" according to their plan, modern foods are too refined, and on and on.

Most of these people are guilty not of vicious crime, but of greedily promoting their own ideas or products for financial gain. Some sincerely believe their own spiels and are fanatically devoted to their "cause." An excellent example is the group that wants everybody to live almost exclusively on raw vegetable juices, with "a little bit" of meat and cereal occasionally. Needless to say, they often sell juicers. Another believes that only hydroponically-grown vegetables are fit to eat. Yet hydroponics is only the science of growing vegetables indoors in water instead of in soil. Carefully controlled conditions of temperature and humidity are provided, and the roots are fed a scientifically prepared solution of organic, or natural, fertilizers. The vegetables grown in this manner are magnificent in size, quality and nutritive value. The prices charged are astronomical, but there is a large group of people who eat only hydroponic foods. There is no doubt that they eat like kings and queens, but very few nutrition authorities can be found to say that the added cost is practical for the average family. They recommend instead the good quality foods found in the average market.

Then there are the believers in organic or natural, fertilizers. They insist that foods grown with such fertilizers are superior to those grown with man-made chemicals. The only fallacy in this is that all fertilizers, natural or man-made, are merely chemicals. Man has learned what is in the natural fertilizers, and how to find it in mines, crushed rock and from other sources, and how to put it together so that it will do what he wants. Plant roots take up only water-soluble chemicals from the soil. It really does not matter whether those chemicals come from a man-made or a natural mixture.

The ever increasing number of elderly people flocking to Florida whose health is not what it used to be, or who because of economic reasons or sheer loneliness do not watch their diets as they should, are especially vulnerable to attack by the food faddists. The irresponsible promises of better health, longer life and a return of vigor made by these promoters and slick salesmen are hard for such people to resist.

Food in History

From the dawn of history until the present day, food has been one of man's major problems. Earliest man lived on what he could get, worrying far less about a balanced diet than about any diet at all. As nations were formed, great wars were fought over grazing lands and fertile valleys. Such wars are mentioned in the Bible, where we also learn of man's first dietary and sanitation laws as observed by the Jews.

Marco Polo and Columbus both undertook their hazardous adventures partly because of food considerations. Polo walked more than ten thousand miles, to "far Cathay" and back, to find among other things sources of the enticing spices and flavors known to be used by the Chinese. After the Crusades had closed off the trade routes by which Europeans were getting these Oriental delicacies, Columbus convinced the royal court of Spain that the "Spice Islands" could be reached by sailing west, and they supported his plan. But it was not for the conquest of new lands alone, which were not even known to exist, that Columbus sailed. He was seeking food additives, a phrase much in use today to describe flavorings, colorings and preservatives added to modern foods. Columbus was seeking the spices that made the foods of his day more palatable.

As European cities grew larger and food marketing more complex and time consuming, it had become more and more difficult to find palatable food. Kings and princes offered prizes for suggestions on how to preserve

Historians say the butcher slaughtered what he could get when he could get it. Some rang a bell to indicate when meat was available for sale. On Saturday nights the poorer people got good bargains in the left-overs.

food, especially meat, from spoiling. There was no refrigeration, and so spicing, pickling and curing methods were devised. It was these spices which Columbus sought. It was also the competition between various cities and principalities in meat preservation that caused great fairs to be held annually. To this day we use the names of many of those famous sausages and cheeses that received prizes from kings and brought honor to their discoverers. Today we eat Frankfurters, Limburger, Braunschweiger, Berliner sausage and other preserved meats and cheeses, named for the city or fair at which they were first displayed centuries ago.

Only in very recent years has the safety of "store bought" foods ceased to be a source of worry, and occasional food poisoning, in the American home. There are a few grandmothers left today who will allow no one to taste any canned food until it has been boiled. This comes from habits well learned in their early life. They remember that more American soldiers in the Spanish-American War of 1898 were killed by "tinned meat" than by enemy bullets.

All civilized nations now have pure food and drug laws, but these came only in recent years. The United States owes its early progress in this field mainly to Dr. Harvey Washington Wiley, "Father of the Pure Food and Drug Act," who fought long and hard for such a law, and finally saw Congress pass the original act in 1906. It has of course been amended many times since, as the food and drug picture has become more complex, and more knowledge has been gained.

Our Present Day

"The American food supply is unsurpassed in volume, variety and nutritional value. By patronizing all departments of a modern food store we can easily supply all of our nutritional needs. In fact, Americans have to go out of their way, nutritionally speaking, to avoid being well nourished. Deficiency has become a more common problem than underweight." . . . U.S. Department of Health, Education and Welfare.

But in spite of our great nutritional wealth, Florida and the rest of the nation are plagued with the greatest siege of faddism and quackery in our history.

WHY?

We could give page after page of answers from the highest nutritional and medical authorities. They would make dull reading—if for no other reason than that they would all sound so much alike. Boiled down to the simplest terms, the reasons given by the experts are these:

People seem to like to be fooled. P. T. Barnum made a fortune on that theory and believed in it. He also proved it. Showmanship and the art of pretending to be generous while giving practically nothing away are the stock in trade of the faddist and the quack. Doctors and nutritionists are bound by the strict rules of their profession, and their teachings often seem much less colorful and dramatic than those of the quack who has no such restrictions.

The faddists offer the "easy way." Especially in reducing diets, the faddists and quacks offer "Eat all you want and reduce—with our pill," or "Lose five pounds a week without dieting." To professional people these naive suggestions are childish. But they are often not taken lightly by the overweight person who faces the choice of continued obesity or constant hunger.

Buttermilk appears frequently in early Florida recipes. Reason for this was that our pioneers had no way to keep milk sweet.

What Is You

Here is a True or False questionnaire on fo

T F

☐ ☐ 1. Overweight is hereditary.

☐ ☐ 2. Special "low calorie" breads are needed in reducing diets.

☐ ☐ 3. People on reducing diets should not drink much water.

☐ ☐ 4. Meat is a fattening food.

☐ ☐ 5. Grapefruit is a reducing food.

☐ ☐ 6. Proteins and starches should not be eaten together.

☐ ☐ 7. Cooking destroys the nutritional properties of vegetables.

☐ ☐ 8. Feverish patients should not drink milk.

☐ ☐ 9. Milk and fish, and milk and tomatoes are harmful combinations of foods.

☐ ☐ 10. Everyone should take vitamin tablets.

☐ ☐ 11. Toast has fewer calories than bread.

☐ ☐ 12. Craving for a certain food means your body needs that food.

☐ ☐ 13. A hot cereal is needed for breakfast by everyone.

☐ ☐ 14. Pasteurization of milk destroys its nutritional properties.

☐ ☐ 15. Yogurt is more nutritious than milk.

☐ ☐ 16. Today's foods are poor in vitamins and minerals because of worn out soil.

☐ ☐ 17. Weight can be lost without cutting down on food by taking a weight reduction pill.

☐ ☐ 18. Aluminum cooking utensils cause cancer.

☐ ☐ 19. Omitting breakfast is a good way to reduce.

☐ ☐ 20. Enriched bread can be substituted for vegetables and meat.

Food Score?

fads and quackery. Answers on last page.

☐ ☐ 21. Eating rice will cure high blood pressure.

☐ ☐ 22. Sugar with lemon juice added is allowable for diabetics.

☐ ☐ 23. Blackstrap molasses will cure anemia and rheumatism.

☐ ☐ 24. White eggs are superior to brown eggs.

☐ ☐ 25. Raw eggs are more nutritious than cooked eggs.

☐ ☐ 26. Spinach is a highly concentrated source of vitamins and minerals.

☐ ☐ 27. Fish is a "brain food."

☐ ☐ 28. Educated people are known to select better diets than those less educated.

☐ ☐ 29. Adults outgrow the need for milk.

☐ ☐ 30. Arthritis patients should not eat meat, eggs and milk.

☐ ☐ 31. Enough protein can be obtained from eating fruits and vegetables.

☐ ☐ 32. Rare meats are better for you than well cooked meats.

☐ ☐ 33. Vegetable juices are better than raw vegetables.

☐ ☐ 34. Chemical additives are dangerous in foods.

☐ ☐ 35. Cucumbers and watermelon are each a cause of polio.

☐ ☐ 36. Colored glass containers prevent food spoilage.

☐ ☐ 37. Oysters should not be eaten in months without an R in their name.

☐ ☐ 38. It is dangerous to leave food in a can after it has been opened.

☐ ☐ 39. A good lunch for reducing is cookies and a soft drink.

☐ ☐ 40. The more vitamins you take the better.

● They appeal to our vanity. They know how to appeal to our natural tendency to show ourselves and others how smart we are. They know we have a general idea of the meanings of such words as protein, carbohydrates, vitamin and mineral, while knowing practically nothing of their significance. So they ice their cakes of semi-truths and appeal to us with such phrases as, "medical authorities agree—," "nutritionists tell us—," "laboratories report—," until we are smugly satisfied that we have found a scientific ally who agrees with just what we have been thinking all along. The quack uses the age-old sales approach of not *selling* us something, but of making us *want to buy*.

Do not be confused by the terms "Health Foods" and "Dietetic Foods." Health foods usually refer to those special, and often expensive foods, sold in Health Food Stores. Nutritionists regard them as falling mostly into the food fad category. Dietetic foods are sold in many regular markets on a special counter. These include special foods for persons on diets prescribed by their physician, such as salt-free or sugar-free foods.

Added to all this is the tremendous propaganda campaign being carried on at all times by the special interest groups—the promoters of single food items. Their product is completely legitimate and their sales or promotion appeal is truthful, but they are frankly urging us to eat more of their own particular product. The quacks and faddists have adopted many of these methods, and so all the campaigns and promotions and sales pitches sound much alike.

But they're not.

To make it easier for you to absorb and memorize, we have compiled a list of ways of telling them apart. Become thoroughly familiar with it.

Columbus brought the first citrus seeds to America on his second expedition in 1493. The fruit had originated in the orient and been brought successively to Turkey, Italy, Spain and then the New World.

Keep it in mind when reading or listening to radio and TV. Here they are:

A person is a quack who:

- Offers a "special" or "secret" machine or device or formula.
- Guarantees results.
- Advertises or uses testimonials for promotion.
- Demands "recognition" of his "discovery" by conventional authorities.
- Claims the medical profession is "persecuting" him.
- Tells you that ordinary foods and utensils are harmful.

Modern Foods

Today's foods are immensely complex. The loaf of bread which our grandmothers made from flour, water, shortening, salt and yeast now contains from twelve to twenty ingredients. Some of these are additives, and serve all sorts of purposes. For example: There are chemicals added to improve flavor, texture, color and keeping qualities. Others replace the vitamins and minerals removed in the wheat milling for enriched bread.

The same is true of hundreds of other foods. But of this we can be sure: THE UNITED STATES GOVERNMENT IS PROTECTING ITS CITIZENS AGAINST DANGEROUS ADDITIVES AND CHEMICALS. One has only to recall the famous cranberry incident of a year or so ago to know that the Department of Health, Education and Welfare is alert, ready and able to take strong action if the public health is in danger. Remember that when you hear or read material attempting to warn you against chemicals added to foods. Just remember that foods are made up entirely of chemicals. The fact that some are "added" has no significance in itself.

Overweight

THERE IS NO WAY TO REDUCE EXCEPT TO CONSUME FEWER CALORIES.

On that grim fact all authorities agree.

But because it is such a grim fact, and affects so many people, an enormous amount of attention is being given to it by professional nutritionists and medical authorities, and by a veritable army of faddists, quacks, promoters and opportunists, ranging in character from the most heartless fraud to the most benevolent of eccentrics.

It is a well known fact that the best way to reduce is to push firmly against the edge of the table after the first helping. This is not funny to most people with a weight problem. Leaving the dinner table hungry after every meal is no joke, and the doctors and quacks both know it.

Authorities agree that "consuming fewer calories" does not necessarily mean just "eating less food." Anyone who has seen a calorie chart knows that there is a very great difference in the amount of calories in different foods. It is on this basis that all medically approved, and some fad diets, are designed.

There is also a great difference in people and their assimilation of foods and calories. An overweight person is quite certain that that skinny friend who sits and eats mountains of heavy starchy foods and rich desserts was sent to torture him. There are those who must battle constantly to keep their weight down, while skimping along on what seems to them a canary bird's rations, while there are others who seem to be able to eat anything and never gain. There are many factors that contribute to weight gain and certainly all of these factors are not fully understood.

Crash Diets

The "crash" diets are those which are supposed to remove a lot of weight in a very short time. They are usually based on one or two very low calorie foods, and are usually suggested for a short period of time. There was, some years ago, the "Hollywood Fourteen Day Diet," supposedly endorsed by the movie stars, and involving eating only dry whole wheat toast and orange juice for two weeks. This would surely remove poundage, and it would just as surely drain the body of needed nutrients. More recently there have been the grape diet, grapefruit and honey, bananas and skim milk, and other similar drastic schemes. Any semi-starvation diet, unbalanced in composition and insufficient for bodily needs, should be avoided.

Most of the nation's great popular magazines have at some time sponsored their own diets. Many others have appeared in newspapers and been promoted by reputable organizations, many with medical approval. The one thing they all have in common is the idea that you can lose weight without going hungry—by following a plan of eating moderate amounts of well balanced meals containing palatable, low calorie foods. Many of these diets can do you much good and little harm, if you are free of the disease

and don't try to go too far too fast. But beware of the "Eat all you want and take our pills" diets. Beware also of ANY diet that is based on one or two foods, because nature simply does not work that way. Lose a few pounds slowly, on your own, by eating moderately and using enough of the basic four food groups. For real obesity and its problems, see your doctor every time.

Supplements and Wonder Foods

The other field in which faddism and quackery are so prevalent is that of food supplements and wonder foods.

Faddists make a great thing of telling us our soil is depleted and no longer capable of producing nourishing foods. They tell us that modern refining methods remove nutrients from our food and we need their particular supplement to balance our diets.

Neither story is true. The world's farmlands have not grown nourishing foods for thousands of years and then suddenly, in one or two generations, gone barren of nutrients. And the refined foods about which they rail so much are in most instances as nutritious as, or even more nourishing than, the original foods. The ingenuity and scientific know-how of modern food manufacturers in improving their products, is to be praised, not blamed.

The "wonder foods" are a different problem. In no case are these foods poisonous, or harmful in themselves. Their sale cannot, and need not be prohibited. It is the exaggerated and sometimes ridiculous claims made for them which make them subject to investigation. Yogurt, for example, is simply fermented skim milk, and has no virtue not found in skim milk. Blackstrap molasses is the last dregs remaining from the sugar refining process. Wheat germ is part of the wheat removed in milling. It contains some vitamins and is nutritious in other respects. Brewer's yeast is a good, concentrated source of some vitamins. The queen bee's royal jelly has been found to have no special beneficial properties for human beings. There are no wonder foods. All foods vary in protein, carbohydrate, vitamin, mineral and caloric content, and it is therefore advised by all nutrition authorities that people in normal health should eat a wide variety of them, making sure to balance them properly.

Additives

Recently public concern has grown over the safety and quality of the nation's food supply. Because of this, a Science Advisory Committee was appointed by the President to make a study of food additives and report on the issues involved in protecting the nation's food supply and maintaining our national health. This committee report stated in part that

"careful regulations have been provided to guard the health of the public from unwitting exposure to toxic chemicals in food".

Additives are sometimes put in foods to improve color, taste and act as preservatives. These must be listed on the label and constant checking is done to be sure that Federal Food and Drug regulations are met. There is constant vigilance by governmental agencies to insure safe, wholesome, good quality food and there is no need to pay attention to the quacks who would have us believe that we are constantly being poisoned by food additives and for safety should buy "such and such" products which they are selling.

Where We Stand Today

The future for Americans in matters of food and nutrition is bright indeed. Our farmlands, which for years have been pouring forth food stuffs in excess of our needs, are capable of supplying our increasing population with the best and most nutritious foods the world has ever known.

The Florida homemaker has an abundance of natural sources of nutrients at her finger tips every time she goes to the market. There are our famed citrus fruits, in great variety almost the year around (and do you know that lots of Floridians rarely eat them?). There are the vegetables from the muck lands of the Everglades available almost all year round. There are also many varieties of tropical fruits such as mangoes, avocadoes, Japanese plums, pineapples, all waiting to add their special appeal to the Florida menu. Nutrition authorities are unanimous in their endorsement of these sources of vitamins and other nutrients. They all agree we might better spend our food dollars in this way, than for vitamins and supplements not prescribed by a doctor.

To Sum Up

Buy and serve the most nutritious foods you can afford.

Balance meals according to "The Basic Four" chart (See inside front cover).

Eat enough, but not too much, of the right foods, and see your doctor if overweight is a real problem.

EVERY TIME someone tries to sell you an idea, a product or a device that is not found in the ordinary run of foods and appliances, ask yourself:

Is this really for my health or his pocketbook?

Would my doctor approve?

Answers to the True and False Questionnaires—They were all false, of course!

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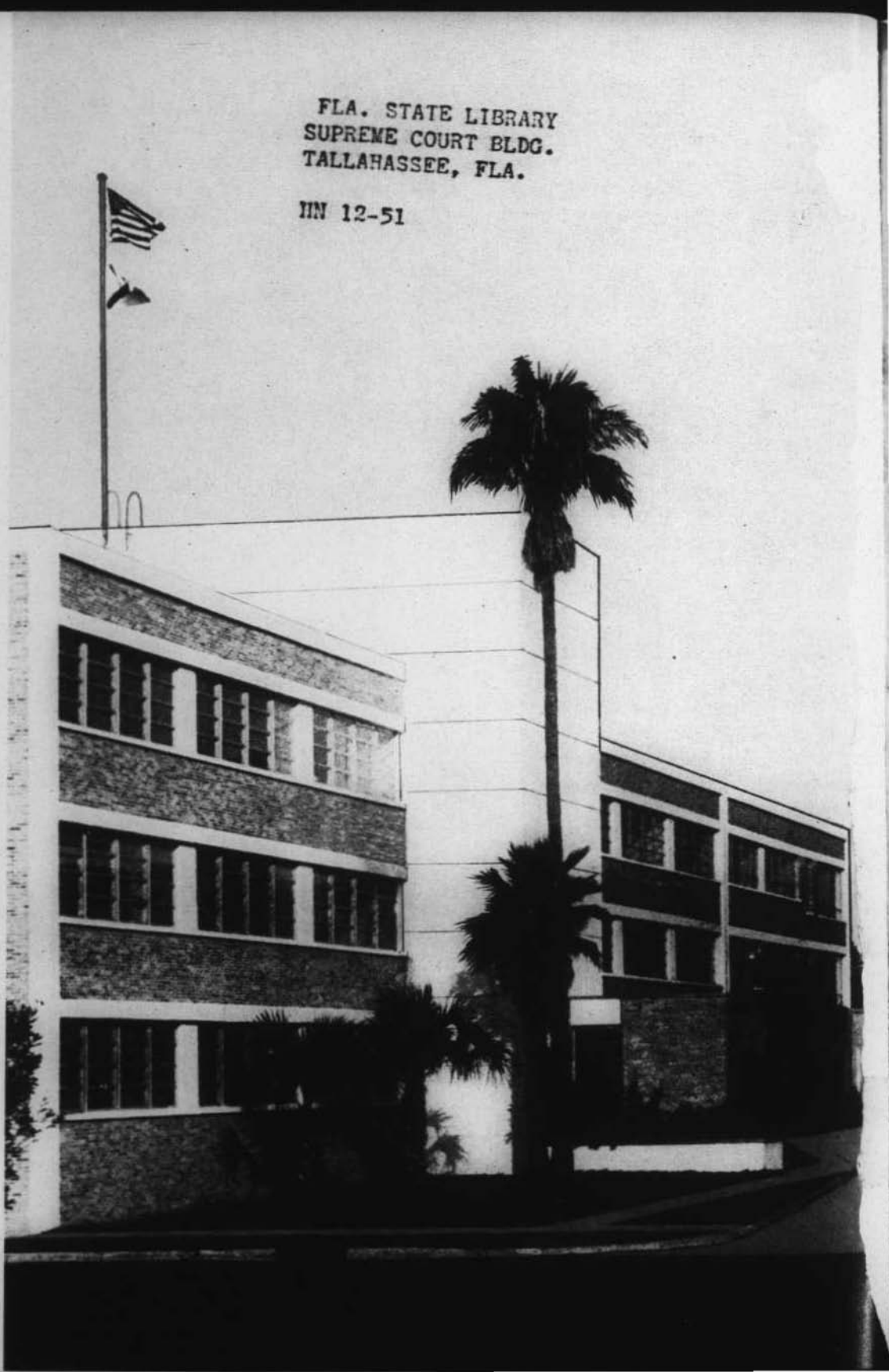
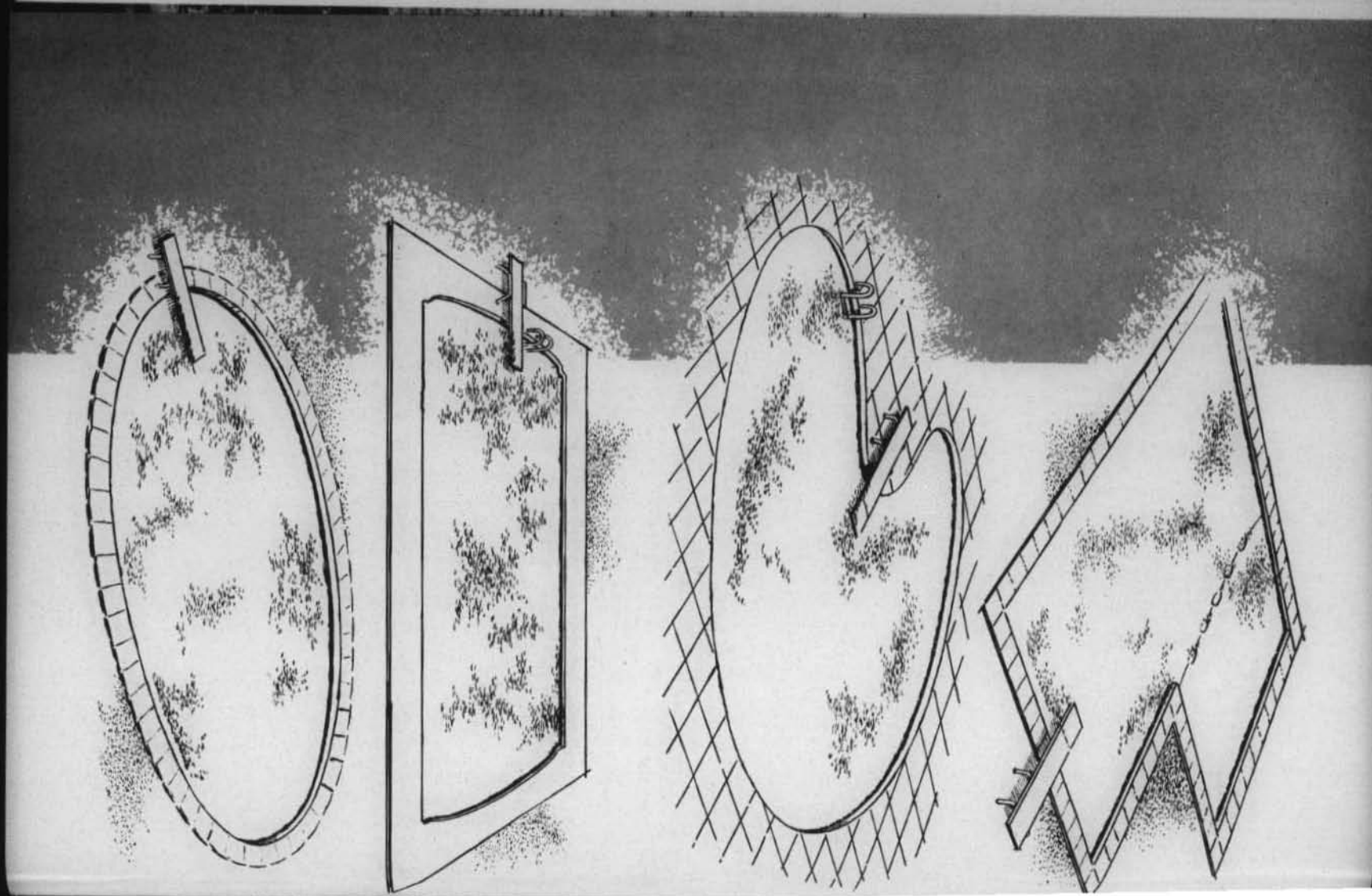
All Counties in Florida have organized county health departments, except St. Johns County

FLORIDA HEALTH NOTES published by Florida State Board of Health since 1892



Florida HEALTH NOTES



SWIMMING POOLS

Driving along Florida's highways one sees many beautiful and attractive motels, hotels and trailer parks—and rare indeed is the motel or trailer park today which does not boast of a swimming pool for their guests to enjoy after a day of driving. More and more hotels and clubs are also adding pools as attractions. Municipal pools are on the increase and the backyard pool for the private home is advertised widely.

For several years this trend has been apparent to the Bureau of Sanitary Engineering of the State Board of Health and they are rightfully concerned over the health problems involved. For there *are* problems whenever groups of people bathe in the same water. This issue of *Florida Health Notes* is devoted to some of the problems involved in all types of swimming pools and some of the solutions to those problems.

In the "good ole days" people went to beaches, lakes and other natural bodies of water when they wanted to swim. Swimming pools were few and, for the most part, owned and operated by municipalities or private organizations. But since World War II there has been a population growth unprecedented in the state. The municipal pools have been hard pressed to provide clean, sanitary facilities for the numbers of people who visit them. Crowded pool conditions encouraged people to want their own private pools in their own backyards. Plastic wading pools for the kiddies were invented and some of these were almost large enough to swim in. To provide a cheap source of water some home owners had their own

FLORIDA HEALTH NOTES

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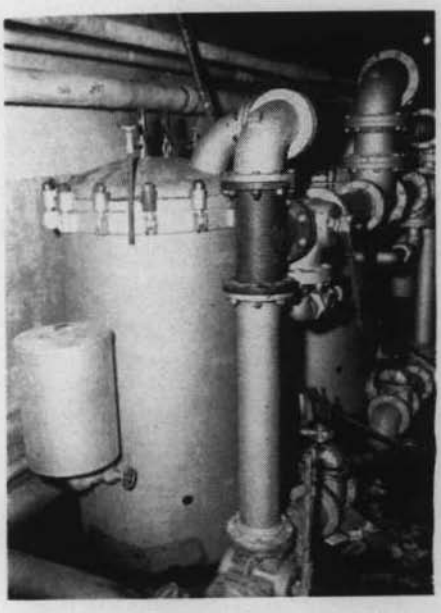
This is a public pool where hundreds of bathers swim daily. This water must be kept pure and clean.

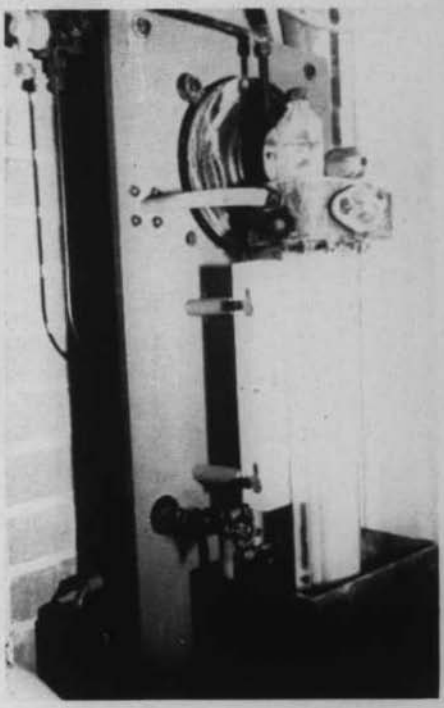
wells drilled and used this water for swimming and watering their lawns. Some of these wells provided safe water and others did not. Many people did not even bother to have the water tested even though it is a free service provided by the State Board of Health laboratories.

So, recognizing the responsibility of protecting public health, the Bureau of Sanitary Engineering, through its Division of Water Supply (and with the help of County Health Departments), has carried out a four point approach to the problem. *First,* the pool must be constructed in such a way that it complies fully with the regulations of the Sanitary Code; *second,* the water used in the pool must be pure, uncontaminated, and the treatment system fully capable of maintaining the proper chlorine and pH levels (acid-alkaline balance maintained in the water); *third,* operators of public pools must be trained in the mechanics of care and maintenance of the pool and the proper testing and treatment of the water; and *fourth,* owners of both public and private pools must be educated in proper maintenance and care of the pool and their surrounding facilities.



Here we see the huge sand filters through which the water in the pool shown on page 148 is passed at least twice daily. In the center of this issue is found a drawing showing the method of purification and recirculation of water in pools like this one.

Chlorine is introduced into the water with this mechanism. Through proper control the correct amount of chlorine is put into solution to prevent spread of disease.



WHICH DO YOU HAVE?

There are two basic types of pools—the public pool, which is open to public usage, and the private pool which is used by the owner and his family and guests. In 1959 there were 269 sets of engineering plans for new swimming pools reviewed by the State Board of Health. These were all for public pools. The Bureau engineers studied the plans to see that proper basic construction, gutters, drains, filtration, recirculation and water treatment mechanisms were the type recommended for the size pool involved. Water for use in the pool was tested by the State Board of Health laboratories. Short courses of instruction were held in various parts of the state for pool operators to train them in the proper water testing procedures and techniques of pool operation. Through the sanitary engineers and sanitarians employed in County Health Departments, the pool owners were taught the basic fundamentals of water treatment

and testing, especially where there was no certified operator in charge of the pool while it was in use. A monthly report form was devised whereby pool owners periodically report the readings of their tests to the engineers. Public pool owners and operators have become cognizant of their responsibility to their patrons and cooperation has been excellent.

But private pools present a different set of problems. There are many companies who build backyard pools. For the most part these pools are engineered and designed to protect swimmers and follow pretty well the accepted methods of filtration, recirculation and water treatment in their construction. We are referring here to the pool which is built and installed by a reliable company well versed in swimming pool construction, filtration, recirculation and water treatment. (Where there has been "corner-cutting" and construction without proper plans or experience some pretty bad pools have come into existence.) Unfortunately, the pool owner, once the construction is finished, becomes his own expert and, in many cases, does not follow the recommended procedures for maintaining cleanliness and good health standards. Since the number of such private pools is so large that there is not even a record of them, one can easily see that the engineers of the health department could hardly make a check on them. In some areas local ordinances govern their inspection.

DOWN TO BRASS TACKS

If you'd like to know about how swimming pools should be constructed and operated, whether you're the owner of a 50,000 gallon pool or your children have a plastic wading pool the following information may be of value to you—for each pool has its own peculiar problems.

Beginning with the water supply it can best be said that if you use city water that is safe for drinking it may not necessarily be safe for swimming. The chlorine content is not high enough and by the time the water has traveled through the intricate series of pipes and mains to reach your pool, it has lost much of its chlorine content. This does not mean it is not safe for your household use. It is quite safe. The chlorine placed in the water at the plant has given good protection against any harmful disease-causing bacteria and other organisms which may have gotten into the water before it reaches your home. But when used for swimming the water generally does not contain enough chlorine to kill the bacteria and organisms that are washed off your skin into the pool water, by normal and abnormal discharges from the mouths and noses of the swimmers and by contamination from the air and surroundings of your pool. Therefore, your water must have added chlorine before it is safe for swimming, and the chlorine concentration must be maintained.

If you have a well drilled on your property it might pass the laboratory tests as devoid of contamination and fit for use. However, as we have just pointed out there are organisms placed in the water by the swimmers themselves which must be neutralized before the water is safe and not germ-laden.

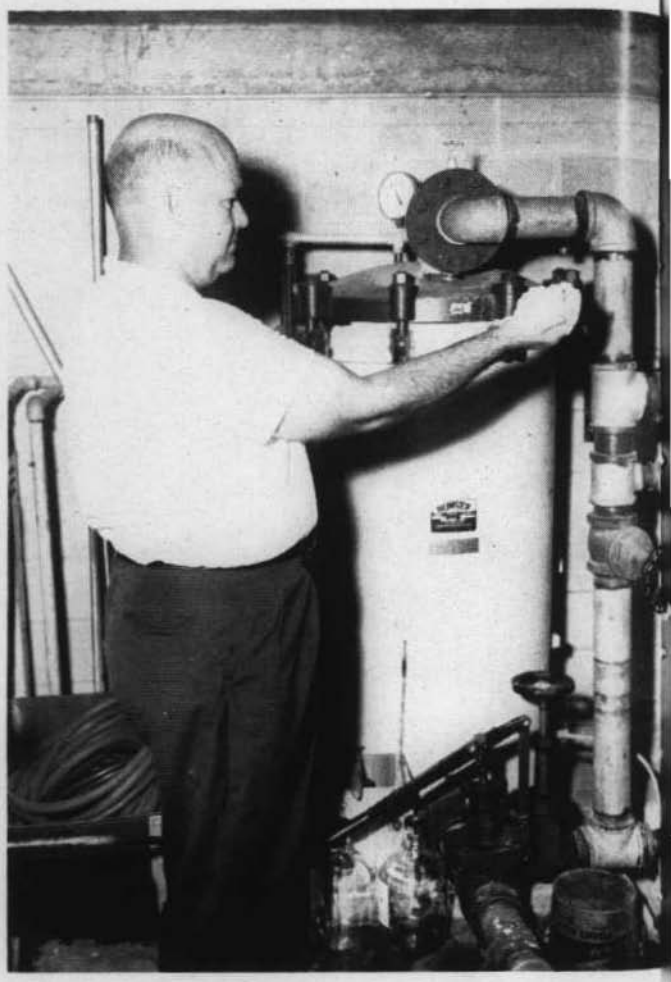
WHAT GERMS?

What are some of these organisms which we must avoid? There are bacteria on the skin, such as "staph" infections (which cause boils and sores on the skin), which can be washed off but if they reach an open place in your skin, such as a cut or scratch that is unprotected, they may cause infection. Obviously, a person with an open sore is washing off the infectious organisms in the pool water. People with such skin sores and boils should not, of course, bathe with others. Besides exposing themselves to additional infection they are also exposing others bathing in the pool with them.

Diseases which are spread by discharges from the nose and mouth and intestinal tract are also common potential hazards to persons using swimming pools. Since viruses and bacteria will frequently live for long periods of time in moist environment, untreated water in the swimming pool affords them an easy means of transmission from one person to another. The most commonly encountered diseases are those infections of the eyes, ears, nose and throat, the virus colds and influenza, and skin infections. The virus of infectious hepatitis is a particular potential hazard since it is not killed unless the levels of chlorine are kept fairly high. Fungus infections, which are often associated with swimmers, are usually not obtained from the water but from the floors of the areas surrounding the pool.

It must be remembered that swimming is a very healthful exercise but also a rather strenuous one which, if indulged in for long periods at a time reduce the body's natural resistance to disease and makes it much easier for one to become ill from organisms picked up in the water. Health authorities tell us that one swimming pool problem is that of using the pool as a "baby sitter" wherein the children are placed in a pool or allowed

The average cost for swimming pools whose plans were approved by the State Board of Health in 1959 was $13,850. Of course, there were many larger (and more expensive) and many smaller (and less costly) pools constructed. Included in the above cost was the necessary equipment for recirculating and purifying the water.



The sanitarian here checks a handful of diatomaceous earth which is used in the filter system of a smaller public pool at a Florida motel. The material shown here filters unwanted solids from the water as it is pumped through the recirculation machinery.

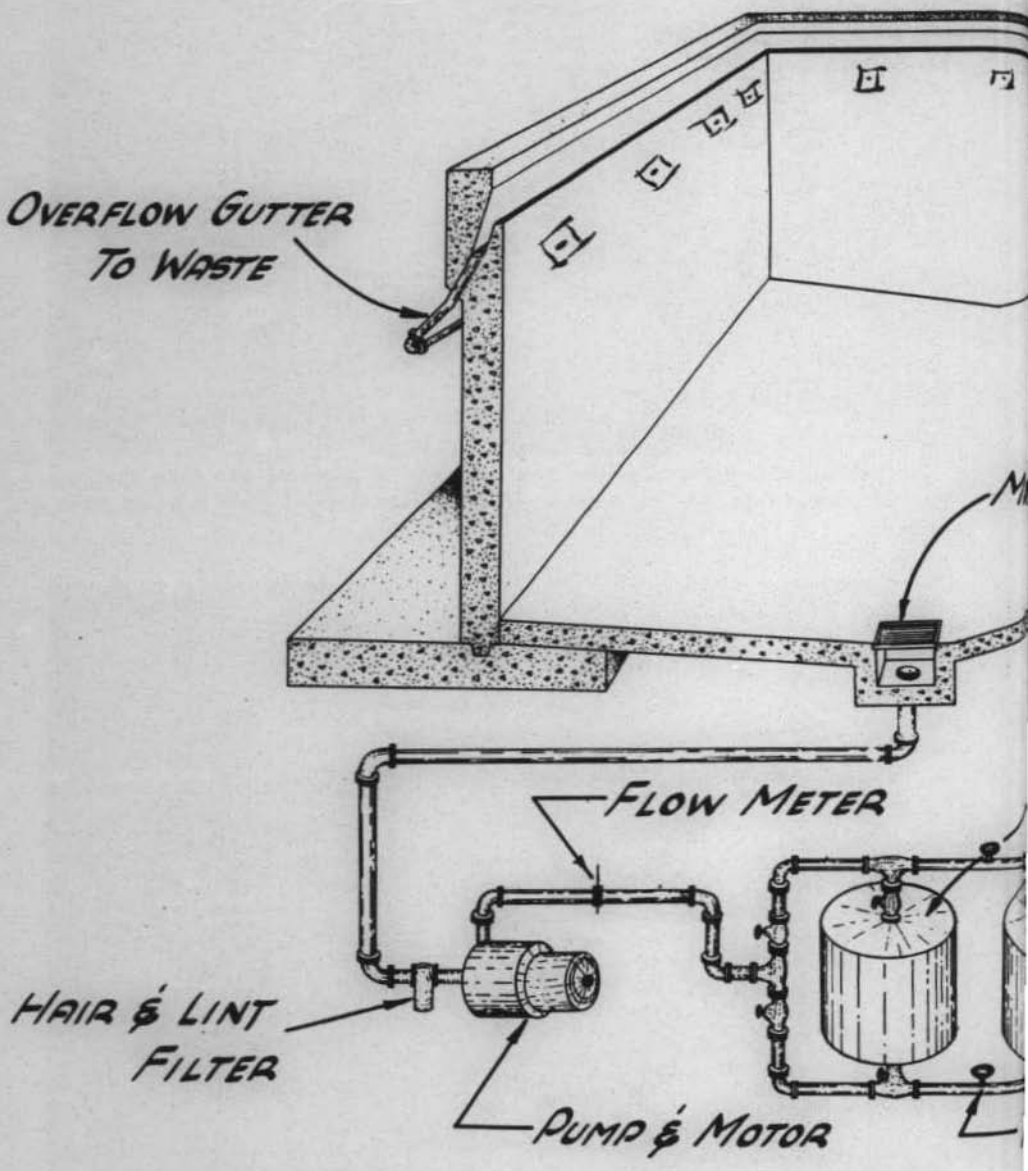
to stay in a public pool for hours. Here we have the problem of the mucuous membranes in the nose and throat becoming water-soaked and soft—an open invitation to penetration by disease germs. In addition, the protective coating of wax found in the ears is washed away and fungus and other organisms find it comparatively simple to attack these portals.

SOME ANSWERS

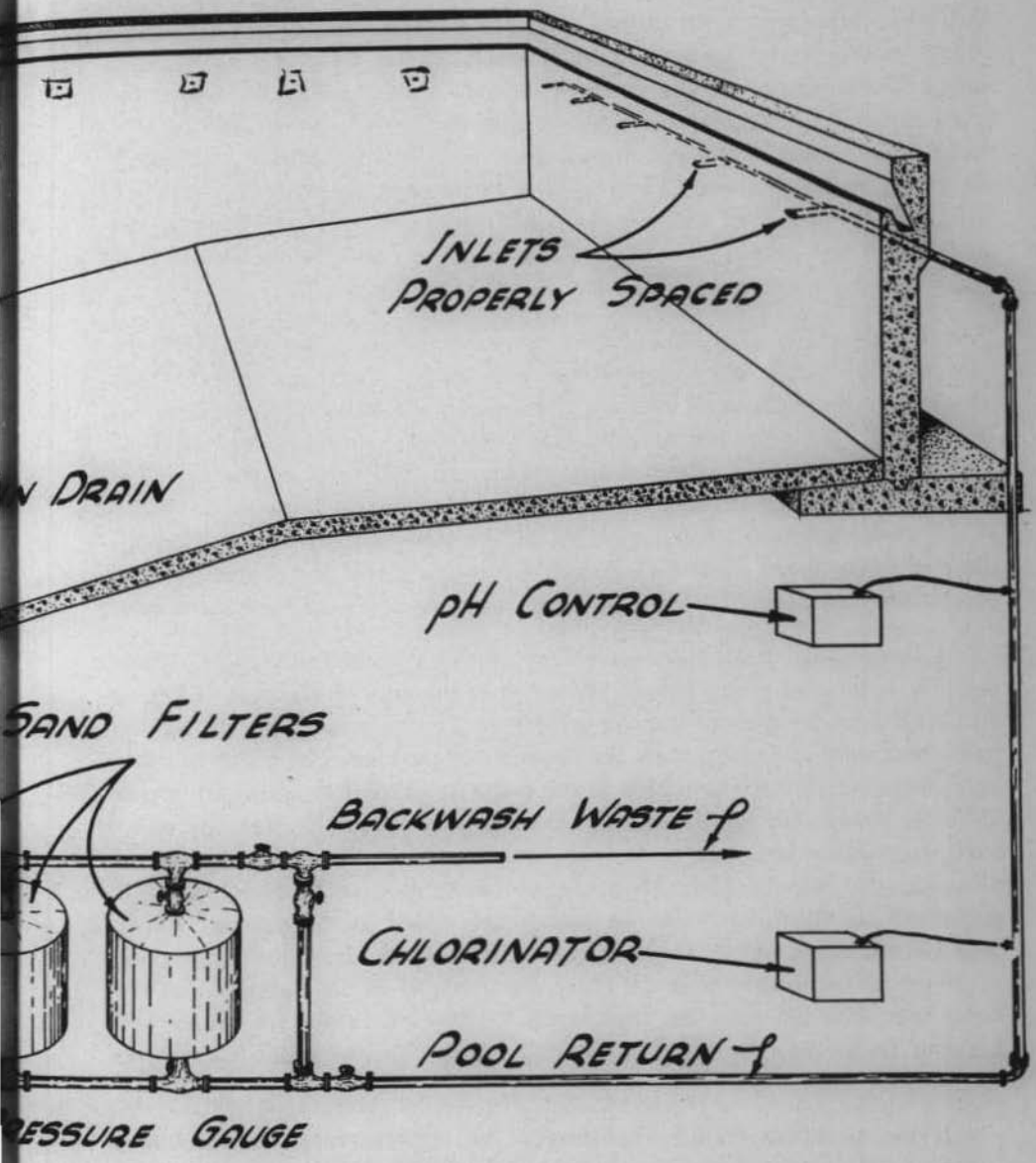
Well, if there is all this particular danger in swimming, what can be done to prevent illness? The solution is not so difficult as one might imagine. Mainly, the pool owner must understand that the problem exists and that it is economically within his power to overcome these problems.

By adding a few drops of the pool water to a chemical and then checking the color (inset) the sanitarian knows if the proper chlorine level is being maintained.

The balance between acid and alkali in the pool is called the pH factor. Although home pool owners may make this test by color comparison the sanitarian here uses an electric machine which indicates the factor by immersing a wire lead in a sample of the water.



The water flow system for a swimming pool shown above is rec
Water from the pool flows out through the main drain, is drawn through
pumped to the top of the sand filters and seeps through to the pool-r
other undesirable materials. When it reaches the pool-return line it then
to kill bacteria and germs. The pH control measures the acid-alkali bal
The water then reaches the inlets spaced about the pool wall and is



nded by the State Board of Health's Bureau of Sanitary Engineering.
hair and lint filter by the suction of the pump. From here the water is
line. As the water passes through the sand it is cleansed of trash and
s past the chlorinator where the proper amount of chlorine is introduced
and adds one or the other to keep the water at the proper pH level.
again for the swimmers.

The large public pools, where perhaps hundreds of people swim daily, are equipped with filters, pumps, chlorinators and other items which maintain the proper chemical levels in the water for safe swimming. Obviously, to keep a constant flow of water coming into the pool at all times would require thousands of gallons per day and would be very costly. Therefore, the water in the pool is drawn off and sent through the filters to be cleansed. Then it is pumped past the chlorinator which puts a fresh supply of chlorine into it and it is then piped back to the pool. With the proper treatment of filtering and chlorination the water is again safe for swimming. This is called recirculation.

The filters vary in type and construction. There are filters which contain sand and gravel which remove impurities. There are others which have wire screens coated with DE (Diatomaceous Earth), commonly called "Filter Aid", which performs the same work as the sand and gravel filter. There are mechanical chlorinators which add chlorine as the water is being recirculated and there are machines which put chlorine in the water as a gaseous solution. But regardless of the type of treatment equipment the end result is the same—clean and clear water with the proper amount of chlorine maintained in it to minimize danger of disease and infection.

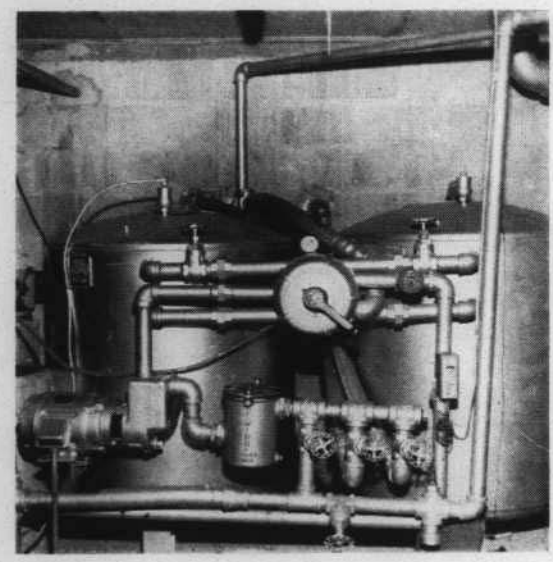
The backyard pools have somewhat different problems. Unless a pool is quite large and many people are using it the cost of elaborate filtering and treatment equipment may be excessive. Yet the water must be treated to make it safe, and the private pool owner can purchase chemicals in packaged form which may be added to the water as needed to maintain proper chlorine levels. He can purchase surface skimmers to help clean the water surface or have the pool built with scum gutters. Vacuum cleaners for cleaning the bottom and side walls of the pool may be purchased. A packaged chemical may also be purchased called an "algaecide" which will kill the algae before it gets a chance to form on the sides of the pool. It might be mentioned that the algae are invisible to the naked eye at the time they first get into the pool water. They only color the water and become visible as they begin to develop rapidly and to attach themselves to the sides and bottom of the pool.

If the backyard pool has no facility for recirculating the water it is important that it be drained often and cleaned before refilling. While the water is out of the pool, a scrub brush, a good detergent and plenty of elbow grease will keep your pool clean and safe, especially if you use the packaged chemicals mentioned above. A good heavy coat of paint is always recommended for all pools.

This is a home owned pool of approximately 50,000 gallons. This pool has its water recirculated about three times daily.

How can you tell if your water is properly chlorinated and safe for use? There are inexpensive testing kits available which may be purchased. They use a simple system of color comparison to indicate the water's condition.

While you are learning about testing water, you will probably hear the expression "pH factor". This is a condition which indicates the relationship between the alkali and the acid in the water, or the proportion of each. The pH is measured on a scale of fourteen, with a measure of seven considered neutral. Any reading below seven is an indication of acidity and a reading above seven indicates alkalinity. The desired measure runs about 7.6. You will also be able to make a pH test with your test kit; and it will also indicate whether to add chlorine or not.



Although much smaller in capacity you will note that the filters and pumps seen here are similar to those used in the large municipal pool and the drawing in the center spread. Chlorination is accomplished by the small pump seen at left.

If the swimmers are found to have red, burning eyes this usually indicates a slightly acid condition, usually caused by the formation of hydrochloric acid when chlorine is introduced. Normally this would be offset by an alkaline solution which is also chemically formed and which would offset the acid.

For children's wading pools a simple system is the addition of ordinary household bleach to the water. One type of pool is about two feet deep and holds about 1200 gallons of water. Engineers tell us that a pint of household bleach added daily will keep the water safe. Be sure that the pool is not used for at least thirty minutes after the bleach has been poured into it, so that it has plenty of time to get into solution.

Public pools are supposed to be tested three times daily for residual chlorine and pH. Once each month bacteriological (laboratory) tests are made. The backyard pool owner is urged to test his pool at least once daily for residual chlorine and pH and once each month for bacteria. The test kits are very simple to use.

The number of public pools (189) under permit by the State Board of Health in 1950 has increased over nine-fold in ten years, so that by the end of 1959 there were1734 such pools under official permit in Florida.

SAFETY FACTORS

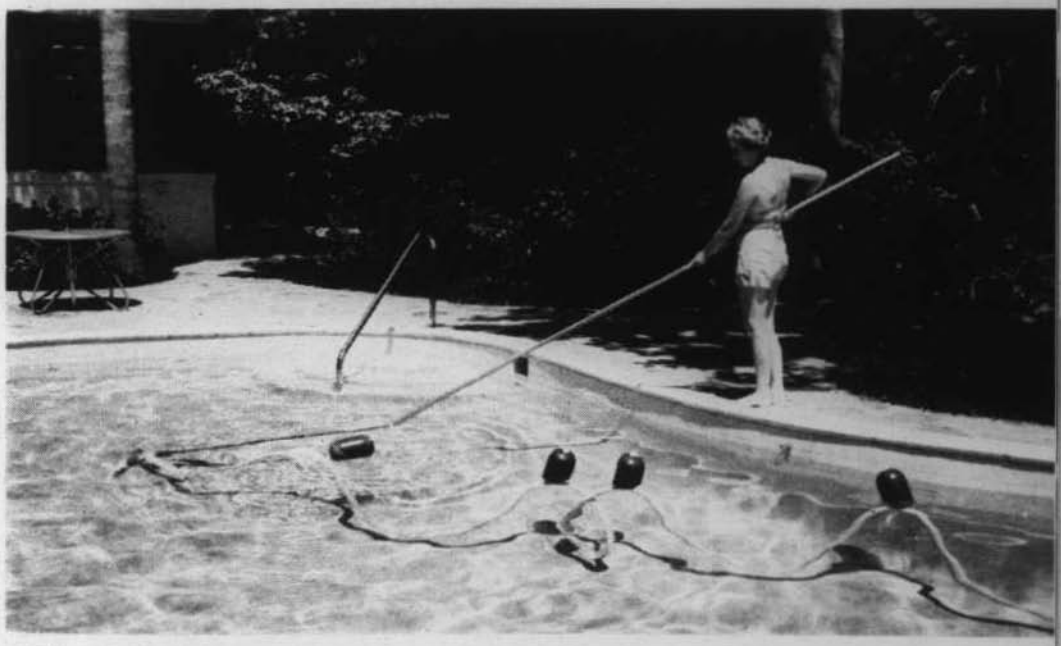
Another important factor, and one in which the State Board of Health is vitally interested, is that of safety. Pool safety is important for peace of mind as well as the prevention of injury.

Children should never be left alone in a pool. Public pools must provide adequate lifeguard protection and such pools operated by motels, clubs, etc., need the help of parents and other adults to watch over the small fry. Water accidents continue to show up in the statistics and one cannot be too careful.

Be careful to see that there are no broken bottles or broken glass of any kind around the pool to cut bare feet. If glass is broken around the pool immediately notify all within earshot to stand clear and, while one person gets something to clean up the glass another should stand guard over it.

Horseplay is something that just seems to go hand in hand with a visit to the pool. Ducking and splashing water is thought to be good fun but many serious accidents, including drowning and near-drowning, have resulted. Running wildly around the sides of the pool may result in

This home owner keeps her pool cleaned of leaves and other trash with the simple vaccum cleaner shown in use here.

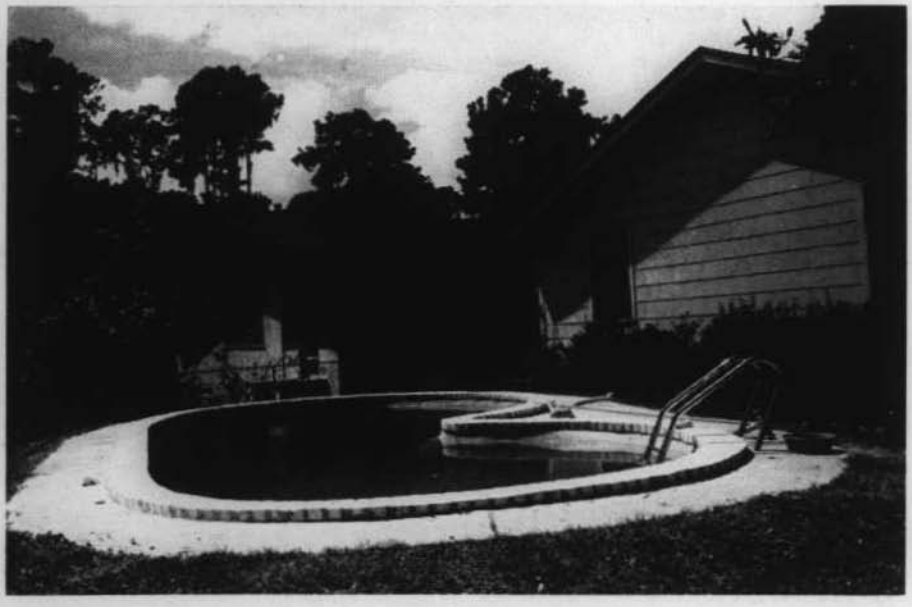


critical falls. Diving rashly into the water may result in serious injury to the diver as well as anyone who happens to be in the water at the time. Throwing non-swimmers into the water is dangerous and deadly. Even though the water into which they may be thrown might be shallow and considered safe the panic and fear that go with such an experience sometimes are damaging.

We repeat the time worn advice "Don't go in swimming for at least an hour after eating". Practically every adult alive today has rebelled at this parental order at one time or another during his youth. But it is still good advice and disregarding it might lead to cramps and drowning.

Although swimming in lakes, rivers and at beaches are not at all the same as swimming in pools it might be suggested here that when you go to one of these places be sure you are in an area free of contamination. (Be sure there are no sewerage systems emptying into the water in which you are swimming and the presence of some types of industrial plants might mean there are chemical by-products in the water which might be harmful.)

This home pool is of the 20,000 gallon size and uses a small sand filter for recirculation. In this pool chlorine is added by hand and all testing is by means of the visual color test for chlorination and pH factor.

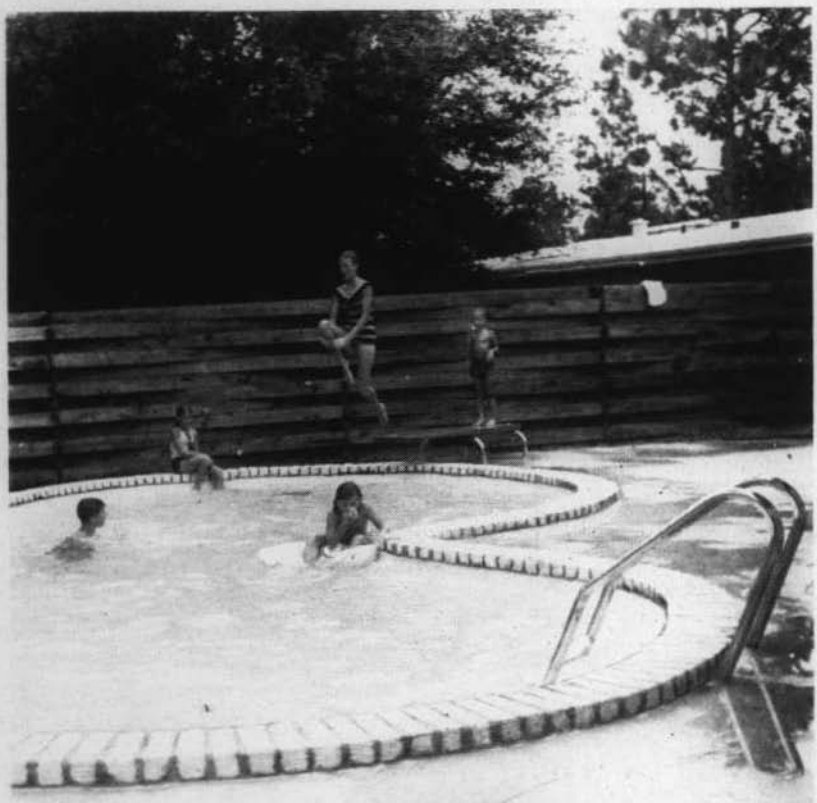


This small plastic pool holds about 1200 gallons. Here the mother is adding a pint of ordinary household bleach to the water to purify it. About 30 minutes later the children can jump in and play. The water is changed weekly.

Usually, most fresh water lakes are safe for swimming if not overcrowded. The natural action of sun, wind and evaporation help keep down the chances of bacteriological infection. There are, however, many types of fungus and algae present, so long exposure to lake and river water might be harmful.

The beaches are usually safe for swimming. If in doubt, contact your County Health Department and find out if the bathing place has a permit.

From 1954 through 1959 the annual volume of new pool construction averaged over $4,309,700, based on estimated costs of construction.



—and let's don't forget,

SWIMMING POOLS ARE FOR FUN!!

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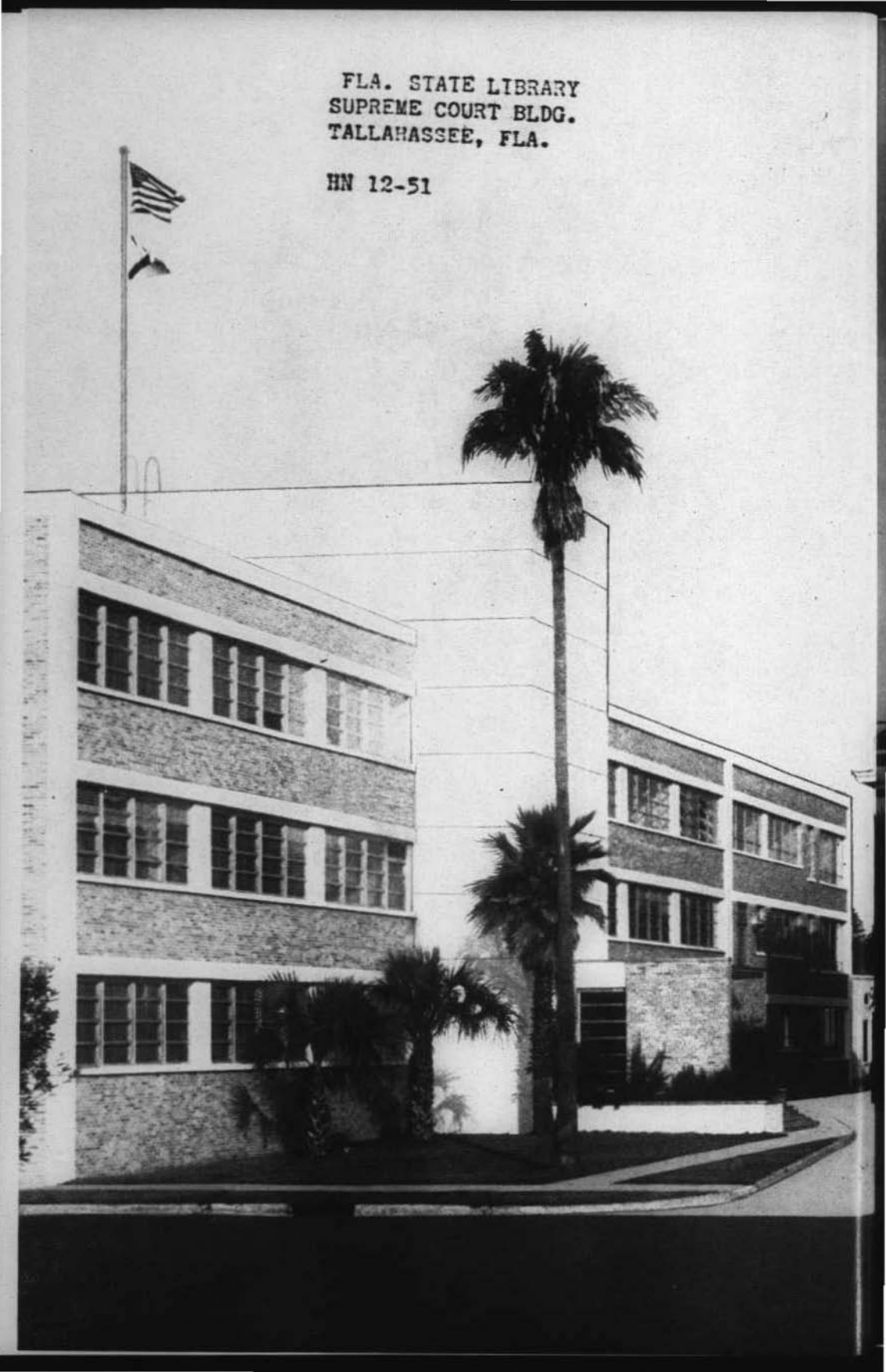

Florida HEALTH NOTES

VOLUME 52 • NO. 9
NOVEMBER, 1960

POISON

POISON

FLORIDA POISONING STATISTICS

(Based on 2587 cases report July 1959 - June 1960)

BY AGE (in years)		
Under 1	57	2.2%
1	581	22.4%
2	583	22.5%
3	325	12.5%
4	110	4.2%
5- 9	79	3.0%
10-19	126	4.8%
20 & over	640	24.7%
Not stated	86	3.3%
BY RACE AND SEX		
White Male	1032	39.1%
White Female	1151	44.4%
Nonwhite Male	168	6.4%
Nonwhite Female	157	6.0%
Not stated	79	3.0%
BY TYPE OF POISON		
Internal Medicine	1271	49.1%
Cleaning & Polishing Agents	343	13.3%
Insecticides	272	10.5%
Others	701	27.8%

POISON

Poison killed 33 children under 14 in Florida in 1959. During that same year there were more than 2,230 cases of poisoning reported by the Poison Control Centers in the state. Children under five accounted for 31 deaths and more than 1,480 of these cases. But one must remember that these figures show only those children treated at the Poison Control Centers (and other hospitals), for not all cases of poisoning are reported. But the reporting system needs only a cross-section of cases of poisoning to show who is being poisoned—and by what substances.

One out of every three persons who dies of poison is under five years old and poison kills more of these children every year than do polio, diphtheria, whooping cough, scarlet fever, tuberculosis and measles combined (25 in 1959). The "villain in the piece" is almost always some common household product. Aspirin, kerosene, sleeping pills, bleach, lye, moth balls, boric acid, fingernail polish remover, camphorated oil, all can—and have—seriously endangered a child's life.

The Florida State Board of Health is greatly concerned about these accidents, and believes they can be prevented. To help avert these tragedies, the State Board of Health and other interested agencies, such as the Florida Chapter, American Academy of Pediatrics, and the Florida Pediatric Society have undertaken the task of alerting the citizens of this state to the danger that exists for their children.

CHILDREN IN DANGER

No age is free from the threat of accidental poisoning, but children are especially in danger. They can-

FLORIDA HEALTH NOTES

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▲ **Children may be generous when it comes to giving an overdose of medicine or other harmful substance to a younger brother or sister.**

not read a label which carries the word "Poison." They do not understand the danger of drinking or eating unknown or unusual substances. Children are constantly seeking information about the world around them, and to taste anything new is important to them. But their sense of taste has not been developed enough to protect them against swallowing dangerous chemicals. Older children and adults reject "bad" tastes. A young child will lick, drink or eat anything if the opportunity presents itself. There has been a definite relationship established between the availability of poisonous chemicals and the number of accidental poisonings.

In far too many homes, potentially dangerous substances are left within reach of children. A survey made in Dade County homes by sixth graders and their parents disclosed that 4.4 per cent of the homes did not adequately safeguard medicines. This Dade County survey also disclosed that 7.0 per cent of the homes did not keep lye, bleach, rat and bug killer and cleaning materials out of the reach of children. The last six-months' report of poisoning cases in Florida shows that internal medicines account for over half of the poisoning accidents in Florida. One-third of the poisonings during this same period were caused by the accidental eating or drinking of chemicals such as bleach, rat and bug killers, cleaning materials and lye. There are many thousands of chemical products which are now available for common household use. Many of them are deadly, when swallowed, inhaled or brought into contact with the skin, as the manufacturers' directions usually state on the label. But little children cannot read. Their parents must take the responsibility.

A glance through the poison files reveals one frequent common factor

▲ **Parents may not know that a child has taken something poisonous until he becomes ill.**

—carelessness. A sixteen-month-old child drank turpentine left by an adult in a bedroom window. Another child, one year old, left in the care of a seven year old, drank roach poison from a bottle lying in the yard. Fingernail polish lying on the bedroom floor near a three year old's bed provided too much temptation for the child. A teenager left external medicine in the bedroom and a year-old child drank it. A

toxic insect spray used when the windows were closed near a baby's bed killed him. Flea powder mixed into a baby's formula killed him. A mother in a hurry grabbed boric acid stored next to her baby's food, mixed it with his milk, and he died. A child died from eating 40 five-grain aspirin tablets.

Not all poison accidents occur to children. One man died from drinking detergent mixed in a glass of water. A grandmother became ill from drinking a solution which she had poured from the original container and stored in her refrigerator. She forgot that the new container contained a poisonous substance.

THE DOCTOR'S PROBLEM

Because of the tremendous number of products that are available in the home, yard and garage, physicians cannot know the ingredients in every product. For a long time, physicians could not use a specific antidote when a poisoned child was brought to them. The label on the container from which the child had eaten often told them nothing specific about the contents. Until recently, when Congress passed a law sponsored by the American Medical Association, many products did not label their ingredients. A chemical analysis could be attempted to determine what was poisoning the child, if either some of the contents

▲ **Seconds count! Phone your doctor and then rush your child to his office or the nearest hospital.**

If the Poison Control Center has the container or the brand name of the product which the child ate or drank, it can find the information it needs, to give the proper treatment.

remained in the container, or material pumped out of the child's stomach could be gotten to a chemical laboratory. But that was not the answer. Some poisons can cause death in thirty minutes, and a chemical analysis may take hours or days. Eventually, each poison will cause specific symptoms to appear, but waiting until they do may make treatment too late.

DOCTOR'S ANSWER— POISON CONTROL CENTERS

Pediatricians were especially concerned with the problem of children's unnecessary deaths when the right antidote wasn't known. Therefore, in 1950 the American Academy of Pediatrics created an Accident Prevention Committee to study accidental injury and accidental poisoning. One of the results which came from this committee's work was the first Poison Control Center in Chicago, established in 1953. Here was kept up-to-date information on household products, their toxic ingredients and the latest and best methods of treatment. Now, when someone was poisoned, all the doctor had to do was phone the Center and he would be given the information he needed.

The idea spread through the country. In Florida, in 1956, the Accident Prevention Committee of the Florida Pediatric Society and the Florida Chapter of the American Academy of Pediatrics made up the first file of cards for Poison Control Centers in this state. It contained the trade names of 1500 substances which were frequently involved in accidental poisonings, and the poisonous chemicals in each substance. A second file containing the treatment required for each chemical was created to accompany the first file. The Pediatric Society provided the funds to purchase the cards and the Florida

▲ The hospital will begin treatment immediately

State Board of Health purchased suitable reference books to accompany them.

A three pronged attack has been made in Florida against poisoning accidents:

1. Poison Control Centers treat cases and dispense information.
2. Public health nurses from the County Health Department follow-up reported poison accidents.
3. The Florida State Board of Health tabulates and analyzes the data collected by the Public health nurses and Poison Control Centers and plans its program accordingly.

The original committee had been composed of fifteen physicians from different sections of Florida. It was decided that each man should return home and persuade a hospital in his area to become a Poison Control Center. Each man accomplished his mission, and thus Florida set up fifteen Poison Control Centers in a short time and all are still in operation.

When a Poison Control Center was ready to operate, all the doctors in that area were notified. The procedure is simple. A doctor with a poisoned patient has only to phone the Center nearest him, tell them the brand name of the product involved, and he will be given the proper method of treatment. Mild cases of poisoning can be treated in the doctor's office or the local hospital, but more severe cases are

▲ **After the accident, a public health nurse may come to visit the home to learn how the accident occurred.**

often taken to the nearest Poison Control Center for additional treatment.

Poison creates two problems. The first problem is to save the victim's life. The second problem is to treat the body tissues damaged by the poison. The after effects of poisoning can be almost as serious as the poison itself. Permanent crippling may result from the poison, because the brain, lung or kidneys may be damaged. Lye, for instance, will corrode the mouth and esophagus so badly that the person may not be able to swallow normally for the rest of his life. Kerosene may cause a pneumonia that is difficult to treat because antibiotics won't help in such a case. X rays show that within one hour after drinking kerosene or a related product, 60 per cent of the patients show a reaction in their lung tissue. In four hours, an additional 30 per cent (for a total of 90 per cent) show this reaction.

All of Florida's Poison Control Centers are located within hospitals and are both information and treatment Centers. In some other states the Centers provide information, but no treatment.

As of February 1960, Florida had twenty Poison Control Centers in operation, more than any other state except New Jersey, which has thirty. Forty-seven states, the District of Columbia, and three United States territories have Poison Control Centers, for a total of 346. There are also Poison Control Centers being established in other countries, for the United States is not alone in this problem. In Japan, suicide by intake of poison is a popular idea among her young people.

OVER THE COUNTRY

To help establish more Poison Control Centers, and to furnish them with the latest information is the function of the National Clearinghouse, established by the U. S. Public Health Service in 1957. The National Clearinghouse receives information voluntarily from manufacturers interested in helping people who are accidentally poisoned by their products. It issues a monthly newsletter and tabulates and analyzes poison cases. And parents need not worry about incompetent personnel giving out incorrect information, because in 97 per cent of the Poison Control Centers the phone is answered by physicians, nurses, pharmacists, or public health sanitarians. Before the National Clearinghouse was established, the Florida State Board of

If you have small children in the home, it is best to buy such drugs as aspirin in a small quantity rather than in large numbers. It follows to reason that a child would be less ill after eating ten aspirins than he would after swallowing a hundred!

▲ **The public health nurse will help you find other hazards still existing in your home.**

Health operated in the same manner for this state.

Immediate medical attention should be given to any child who has eaten something which may be harmful. Anything and everything from the bubbling liquid in Christmas tree lights to home permanent waving lotion may be swallowed by a child. Parents should not wait until symptoms appear because by then, the poison may have done damage difficult to repair. For example, if a child has been eating

Almost anything within the reach of small children is a potential poisoner. Hair spray, cold cream, face powder, cosmetics and cologne should be kept on a high dresser, out of reach of toddlers.

tiny amounts of paint (by chewing on his crib rails), by the time that symptoms of lead poisoning appear, he may be fatally ill. The doctor or hospital must know the brand name of the product the child ate, if they are to give correct, exact information. It is best to take the container to the doctor or hospital. If necessary, the doctor will phone the Poison Control Center to find out specific methods of treatment or the ingredients in the substance the child ate or drank. Once the child has been given emergency treatment and his symptoms have disappeared, his parents may not feel like following the doctor's or hospital's wishes to have him admitted to the hospital for observation. But case histories show that unfortunate results may follow if the child is taken home when he needs hospitalization, for some after effects don't show up in the first few hours. In the first six months of 1960 in Florida 329 poison victims were hospitalized and 790 were not hospitalized.

WHAT HAPPENS NEXT?

Florida, as well as many other states, has a follow-up program. A public health nurse from the County Health Department will visit the home of a poison victim, if the case has been reported. She will have the report filed by the physician or hospital which treated the child. The nurse will try to learn why the accident happened, where the chemical was kept that the child got hold of, and certain other data pertinent to the case. While she is in the home, she may inspect it for other poison hazards, as well as suggest ways to keep the same accident from happening again.

WHO IS POISONED?

The information submitted by the doctor or hospital and that determined by the public health nurse is sent to the Florida State Board of Health, tabulated and analyzed and then sent to the National Clearinghouse. This and other data is studied by state and national health workers in an effort to find ways to prevent like accidents from happening. An analyses of 4,000 cases from the period covered by June

▲ **Could this happen in your home? This average kitchen cabinet contains enough harmful chemicals to poison several children.**

1956 to April 1958 found that 90 per cent of the cases involved children. Eighty-six per cent of these children were under the age of five, the greatest number being one to two years old. Parents were taking care of the child in 85 per cent of the cases, in 10 per cent of the cases another adult was caring for the child. Only 5 per cent of the accidents occurred while an older child was caring for a younger child.

POISONING—WHY?

The National Clearinghouse has determined that there are three main reasons why a poison accident may occur:

(1) *The poisonous substance was not in its original container.*

(2) *The container was not in its usual storage place.*

(3) *The usual storage place was within the reach of small children.*

Many poisonings occur in the kitchens, which are the scene for 41 per cent of the accidents. Twenty-one per cent occur in bedrooms, while bathrooms account for 12 per cent.

Household poisons are divided into five categories:

(1) Drugs and medicines
(2) Cosmetics and toilet goods
(3) Cleaning, polishing and sanitizing agents
(4) Pesticides
(5) Poisonous plants and berries

AN OUNCE OF PREVENTION

Too many people simply don't believe that anything except rat poison and poisonous plants are dangerous. In the past, laws concerning labeling of potentially dangerous products were inadequate. Fortunately, the last session of Congress passed a law which requires adequate and uniform labeling of household products. But manufacturers can only label the contents of their products. It is the parents' responsibility to read the label and take whatever precautions are necessary. When shopping, parents should take the time to read the label before buying and understand any warnings that may be on it. Whenever there is a choice, buying a product with a good safety cap on it is an excellent precaution. But

▲ **The lock on this cabinet will help protect the youngsters in this home who are too young to protect themselves.**

many products do not have safety caps. If a bottle doesn't have one, corking it and sticking pins into the cork will help keep inquisitive small hands away. Also, a potentially dangerous solution is less dangerous in an unbreakable bottle.

Every home should have at least one locked cabinet for the storage of bleaches, cleaners, waxes and similar items. Under no circumstances should a product containing poison be stored near food. Old drugs and medicines should be thrown away, and children should not be given the empty bottles to play with, for broken glass is also dangerous.

Garages, barns and tool sheds should be just as safe for children as the home is. Poisoned candy or food left for rats may kill children if they find it before the rat does. Because children are not overly sensitive to dirt and germs, they sometimes find the garbage can to be a source of great interest. A plaything found there may be an almost empty bottle of poison with just enough chemical left in it to kill.

The agencies interested in poisoning have been searching for data such as seasonal influence, time of day, day of the week, etc., when accidents most frequently occur so as to help warn parents and prevent more poisonings. Spring is the time of year when children and adults are more likely to be poisoned by insecticides and herbicides.

Half of the homes in which poisonings occur are considered "tidy" by investigators. Ninety per cent of the homes have not had an accidental poisoning in the five years preceding the accident being investigated. Children who get up in the mornings before the rest of the household are not safe from poison unless it is locked up or in containers they cannot open. The rate of poisonings also rises in the evening, when tired parents give children medicine without reading the directions, and are more likely to give an overdose or the wrong medicine. Many children have been given a teaspoon of camphorated oil (which is poisonous when taken internally) instead of castor oil. Never should these two be stored next to each other.

Young children of school age may be "generous" to their younger brothers and sisters when it comes to sharing something such as paint remover, or a special recipe that contains all the liquid medicines in the medicine cabinet. Children of this age also may confess that the younger child has eaten something poisonous, but neglect to mention that they had some, too.

Grandparents who aren't used to having small children around have been found more likely to leave dangerous things within their reach. Grandma's pocketbook, containing her supply of sleeping pills, has provided temptation for too many tots, when it was left within their reach. Also Grandma and Grandpa may be more likely to pour something out of the original container into a glass or pop bottle, and leave it in the refrigerator or on a low table. Grandchildren aren't the only ones endangered by this procedure. Sometimes Grandma or Grandpa forgets and drinks it. There weren't as many "store-bought" items containing so many harmful chemicals to guard against when today's parents were being raised.

IT'S UP TO YOU!

Doctors, public health agencies and parents are working together to control childhood diseases. But the rate of children's accidents is not dropping as fast. A doctor can treat and try to save the life of a poisoned child, but only the parent, and other adults in the home of a child can prevent his being poisoned. The 250,000 household products that parents can choose among and buy are not dangerous when used and safeguarded properly. Only parents can keep dangerous products locked up. Only parents can see to it that other adults and older children in the home cooperate to safeguard the younger child. It has been estimated that almost 50 per cent of these accidents would not occur if aspirin were locked up and kerosene were kept in the container in which it belongs. The responsibility for preventing accidental poisoning lies with parents.

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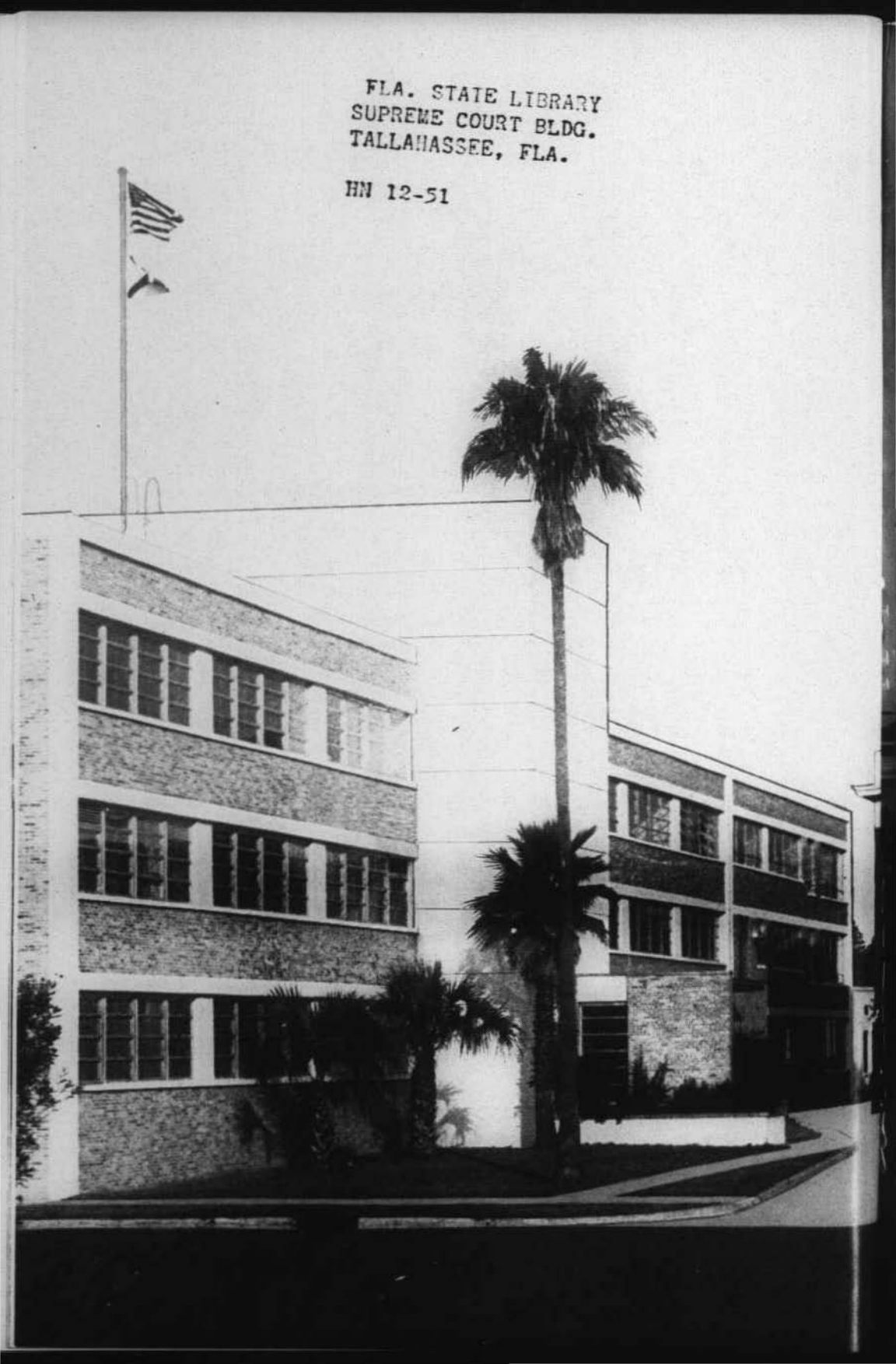

Florida HEALTH NOTES

VOLUME 32 - NO. 10
DECEMBER, 1942

HELP FOR THE TROUBLED MIND

No child is too young to have emotio and behavior problems. They, and t parents, CAN be helped.

Adolescence is a difficult time for most young people. They often desperately want help and don't know where to find it.

Men and women in all walks of life ha mental health problems. Does your co munity have access to a mental hea clinic where they can find help?

The increasing number of persons 65 and over poses a problem. Mental and emotional changes can be less painful if help is at hand.

HELP FOR THE *troubled* MIND

Our fathers and mothers spoke of mental illness in guarded whispers. They said that persons so afflicted were "crazy" or "insane." Today we openly talk about mental illness as our major public health problem. For one out of every 100 persons is ill enough to be in a mental institution—a private sanitarium or maybe in a state hospital such as those at Chattahoochee, Arcadia, Macclenny or Hollywood. This is 222 times as many people as had polio in Florida in 1959, four times as many as the total number of active tuberculosis cases recorded in any year in the State Board of Health's files, or *more than the total number of cases of reportable diseases recorded in the state in 1959*. Mental illness is far and away the state's—and country's—greatest public health problem.

But there is more to the story. Even if you discount the one out of every hundred who is seriously ill enough to be in an institution (where they are getting treatment), the remaining problem is immense. Authorities estimate that 5 per cent of the population or about 250,000 Floridians need the services of a psychiatrist and/or need to attend a mental health or child guidance clinic. They say that 7 per cent more need help from a physician, psychologist, public health nurse or social worker. An indefinite number need aid from the helping professions or agencies such as their pastors, family counseling agencies, welfare workers and others. Add these all together and you will get a picture of the size and complexity of Florida's public mental health problem.

FLORIDA HEALTH NOTES

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And what does the problem mean in money? Close to 22 dollars a year in taxes and lost income from every man, woman and child in Florida for one thing. This amounts to approximately 98 million dollars. That is the direct cost. That is what it takes to run our institutions and such agencies as the courts concerned with juvenile delinquents, for example. The indirect cost is many million productive work hours lost, many thousands of lives blighted by crime, divorce, delinquency and unhappiness. And who can assess what it costs a mother and father in grief when they visit their teen-age son in jail; the anguish of an unwed mother; the frustration with which a wife and children react to their alcoholic husband and father; the despair of children who must place a senile parent in an institution—but this recital could go on and on.

AN ANSWER

What can be done about a problem of this size? There are many people and groups working together: the Florida State Board of Health, the 67 County Health Departments, the 4 State Hospitals for the mentally ill, the Department of Public Welfare, the Florida Association for Mental Health and its local organizations, professional persons: general practitioners of medicine, psychiatrists, psychologists, psychiatric nurses, social workers, judges, ministers and many others. Since it is impossible to talk about all these efforts being made in the interest of preventing mental illness and promoting a return to normal by those persons who are mentally ill, this issue of *Health Notes* will deal with just two efforts in which the State Board of Health and the 67 County Health Departments are greatly concerned: the mental health and child guidance clinics, and the mental health workers.

THE CLINICS

A mental health clinic and a child guidance clinic differ from each other only in one way. The child guidance clinic takes persons up to 18 years of age, and the mental health clinic takes adult cases also. To avoid repetition, we shall discuss the two together, referring to all of them as *mental health clinics.*

The 16 clinics which are sponsored by local organizations, County Health Departments and the State Board of Health, are located in Florida's larger cities (see list elsewhere in this issue) and available to anyone needing their help. Their staffs usually include one or more psychiatrists, clinical psychologists, psychiatric social workers and clerical workers. The clinic cooperates with but often is not housed in the County Health Department. It works closely with the Department but is administered separately, usually by a director chosen by a governing board of private citizens. Financially, the clinic receives support from the state, the

▲ **The patient, who has come in of her own accord, is greeted by the mental health clinic secretary.**

county, often the Community Chest or United Fund and from small fees collected from those patients able to afford them. No one is ever turned away because of inability to pay the fee.

Besides giving service to individuals, the staffs of the clinics spend sometimes half of their time in consultation and education; planning with other agencies, giving talks, advising public health nurses and the like.

But let's stop talking about "things" and concentrate on "people," not cases. Let's suppose you enter the waiting room of a mental clinic in your city. Whom might you find there on a typical day?

★ A bailiff from the circuit court waiting to talk to the psychiatrist about examining a person who is in jail.

★ An elderly man who wants to talk to somebody because his wife is "imagining things."

★ A juvenile court counselor with a runaway boy—this is the third time he has been picked up.

★ A woman who wants to ask for help in dealing with her husband who drinks excessively.

★ A public health nurse who is concerned about two emotionally disturbed children she has seen in school.

★ A mother and father who have brought in their two year old child to find out whether he is mentally retarded.

★ A young man who says "I don't know what is wrong with me. I can't hold a job."

★ A mother of an eight year old son who still sucks his thumb.

★ A minister who wants to discuss a problem of a member of his congregation.

There are also people coming and going who are old patients and who have appointments with various members of the staff—for testing, treatment or other assistance.

The bailiff's business does not take long. The clinic director arranges for an examination of the patient by himself and another psychiatrist to

be made the following day. The patient had pulled a knife on a close friend and the police were called to restrain him. The bailiff is told to ask the jail authorities to isolate the patient as much as possible, and to allow the family physician to see him. The director makes an appointment to discuss the patient with his family doctor. He arranges for the psychiatric social worker to meet with the family to find out what help they need in meeting this crisis.

Many mentally ill persons are diagnosed by physicians and/or mental health clinics and hospitalization may be arranged for them. *But you shouldn't have to go to jail to call attention to your mental illness.* But sometimes mentally ill persons have to be held in a jail until hospitalization can be arranged because there is no other place in the community where such a patient can be safely cared for. This is tragic for two reasons:

1. A person may need hospitalization only on a short-term basis. He may be only mentally depressed and temporarily confused but not seriously mentally ill. What he needs is "first aid." And just as first aid has saved many a life because it was given on the spot, so can assistance in his home community save a person from developing serious mental illness and have to be sent away to an institution. Such aid can involve anything from a shoulder to cry on to several weeks of diagnosis, treatment and assistance with family problems. It should also include treat-

▲ She meets the clinic psychologist who makes some tests which should help reveal her problem.

▲ **The psychiatric social worker fills out a form that will give the psychiatrist information about the patient's family, her early life and other pertinent facts.**

ment facilities for short-term cases in a general hospital in the community. Yet in Florida today only 17 general hospitals have "psychiatric" beds.

2. To be confined to jail is usually a tremendous shock to a patient, if he only needs temporary care, or is acutely and seriously ill and should be committed to an institution. The most disturbed person is, almost without exception, well aware of where he is being taken and will resist violently—wouldn't you? Actually, his illness often grows worse because of jail confinement. A jail was never constructed or set up to accommodate mentally ill persons. *There should be a local or nearby hospital that is willing to care for him, if only temporarily.*

While the psychiatrist is busy with the bailiff the psychologist interviews the elderly man who is worried about his wife. The man tells of his wife constantly worrying about little things. She is sure the house will blow away every time there is a thunderstorm. She is suspicious of her old friends, saying they have turned against her. But he is sure that his wife will be shocked and outraged if it is suggested that she needs treatment. The psychologist suggests that the husband enlist the aid of his minister and family doctor in persuading the wife to

Professional persons are always on the lookout to help *those who come to their attention.* But mental ill health does not occur like an epidemic disease. It attacks individuals, the onset is slow and no two cases are alike. The family, friends and neighbors of the victim should be the first to notice changes in his behavior. Unfortunately it does not always work this way; those who are closely associated with the mentally ill person are sometimes the last to realize something is wrong. Why? because they are used to his slowly changing behavior.

come in and talk things over with the folks at the clinic. The psychologist also agrees to phone the minister and doctor, so that they can all work together. The man leaves the clinic smiling. His problem has not been solved but now he felt that someone is interested in him and now he has a plan of action he can follow.

The juvenile court counselor wants to know if he can get his charge —a 13 year old boy—examined before final steps are taken to send him to the Florida Industrial School for Boys at Marianna. Repeated conferences with the boy's parents have not revealed any reason why he is so unhappy and rebellious. Arrangements are made to begin testing and interviewing him that same day. The counselor exits with a sigh—he is trying just one more thing to help get this "mixed up kid" started out on the right path.

The public health nurse is from an adjacent county which has neither a clinic nor mental health worker on its health department staff. She wants to consult with the director about two children she has noticed in school. One is in the first grade and the teacher says the child is not learning as fast as he should. The other is in the fourth grade and fights with his classmates for no apparent reason. An arrangement is made for the slow learning child to be brought in for testing by the psychologist to see if the child is mentally retarded. The nurse is asked to make an appointment with the family to bring in the quarrelsome child and to write up and send in her impressions of his home life and environment as well as his conduct at school.

The receptionist gave the lady who had the drinking husband the information she wanted. She is told that the clinic will do anything it can to help her, but that the patient will have to come in voluntarily. The lady finds that the state has clinics in several large cities in Florida for alcoholics, which are operated by the Florida Alcoholic Rehabilitation Program. She is also told about the voluntary group known as Alcoholics Anonymous, composed of private citizens who have overcome their own drinking problem, who will work with her and her husband in complete privacy. She starts for home with the feeling that she is not alone, and that a solution may be found for her problem.

The couple with the toddling child is interviewed next. The parents say the child seems dull and unresponsive. Their pediatrician has told them the tot is physically normal, and recommended the clinic. A series of tests the following week is arranged for the child. If he is found to be sufficiently retarded, he will be placed on the waiting list to enter one of the Sunland Training Centers at Gainesville, Ft. Myers or Orlando.

▲ **The patient meets the clinic director, who is a psychiatrist, who talks with her at some length.**

The young man who seems confused is not a surprise to the clinic staff. Many "self referrals," or persons who come in voluntarily without the recommendation of a doctor or other person are seen each month. The man tells the staff member who interviews him that he feels unhappy, restless, worried and cannot concentrate or hold a job. He says he wonders if he is "going nuts." The staff member tells him that he probably is not, and does not belittle his feelings. He feels better for just having talked to someone and "ventilated" his fears. He will be given an appointment, but it will be sometime in the future since there are so many people on the waiting list.

The mother with the eight year old boy who still sucks his thumb is more embarrassed by this habit than she is worried about the reasons which compel him to do something he should have outgrown years ago. After several interviews with him, the director came to the conclusion that it is the mother who needs help to understand how she may better handle this problem. She also needs some insight into her child's needs which she has apparently not had before.

The minister is heard by the director behind closed doors—and all the others were accorded this privacy, too. He says he speaks for a member of his congregation who feels that her marriage is headed for divorce. She is not willing to come to the clinic and discuss her problem with "strangers." The two men have a long talk, and the minister says as he leaves that he feels he now has a better knowledge of how to deal with some of his parishioners who call on him for advice.

It can be seen from the above that no two cases are alike. There are as many different people as there are problems that affect them. The Bureau of Mental Health of the State Board of Health reports that in 1959 patients discharged by the clinics numbered 5,990. It is significant

that 2,327 cases showed "no diagnosis." Many of these were persons who just needed to talk their problems out with a sympathetic, trained listener —who may refer them to others who may help them, or contact members of their family, a teacher, a minister, their private physician. Those cases diagnosed were:

Abnormal brain conditions (causing epilepsy, etc.)	324
Mental deficiencies	436
Psychosis (definite mental illness)	212
Mental disorders from physical disease cause	38
Psychoneurosis (anxiety, compulsion, phobia, depression, etc.)	345
Personality disorders (odd behavior)	980
Temporary personality disorders	909

(Of course, the language of these diagnoses is greatly simplified.)

The clinics make frequent use of what is called *group therapy,* the bringing together of groups of people with similar problems—parents, problem children, elderly people, alcoholics. This is done for both professional and practical reasons. In matters of behavior, attitude, stress and strain, and other such non-medical problems,

▲ The staff of the mental health clinic gathers to discuss the patient's diagnosis and recommended treatment.

▲ **Group therapy was recommended for the patient and here you see her with others who have similar problems preparing to see a film shown by the psychologist at an evening meeting.**

psychiatrists and psychologists have found that people often make more progress toward normalcy when they find that they are not alone, that others have the same problems. The professional person conducting the session also finds it advantageous to have the patients together where they can be shown the progress others are making and how they are making it. And the practical reason boils down to only one—helping more people with the expenditure of the same amount of time, money and space. Just as schools operate with one teacher and a class of students, so do group therapy sessions.

MENTAL HEALTH WORKERS

Awhile back we spoke of *mental health workers*. This is a Florida program that is unique in the United States and we are very proud of what these people have been able to do to promote good mental health in our state.

Who are these mental health workers? Frequently, they are public health nurses who have a special interest in mental health. Often they are social workers with an aptitude in this field. Sometimes they are teachers who have had special training, especially in the field of psychology. They are all on County Health Department staffs and work under

PUBLIC AND NON-PUBLIC INSTITUTIONAL FACILITIES FOR THE TREATMENT OF MENTAL DISORDERS IN FLORIDA

State Psychiatric Institutions

Florida State Hospital, Chattahoochee
Florida State Hospital, Arcadia
South Florida State Hospital, Hollywood
Northeast Florida State Hospital, Macclenny

Veterans Administration Hospitals

Bay Pines, St. Petersburg
Coral Gables

Private Psychiatric Institutions

Dr. Miller's Sanitorium, Jacksonville
(short-term care of alcoholics)
Grant Haven Convalescent Home, Jacksonville
Jacksonville Convalescent Home, Jacksonville
Ballast Point Manor, Tampa
Anclote Manor, Tarpon Springs
Cedars Hospital, Gulfport
(primarily short-term care of alcoholics)
Bayou Sanitorium, St. Petersburg
(now licensed as a nursing home)
White Cross Hospital, St. Petersburg
(primarily short-term care of alcoholics)
Miami Medical Center, Miami
Miami Sanitarium, Miami

General Hospitals Maintaining Psychiatric Units

Duval Medical Center, Jacksonville
Halifax District Hospital, Daytona Beach
Tampa General Hospital, Tampa
Mound Park Hospital, St. Petersburg
Jackson Memorial Hospital, Miami
Memorial Hospital, Hollywood
Florida Sanitarium, Orlando
St. Vincent's Hospital, Jacksonville
University of Florida Hospital, Gainesville
Baptist Memorial Hospital, Pensacola
Sarasota Memorial Hospital, Sarasota
Alachua General Hospital, Gainesville
Baptist Memorial Hospital, Jacksonville
Holiday Sanitarium, Orlando
Escambia General Hospital, Pensacola
Polk County Hospital, Bartow
Baptist Hospital, Miami

General Hospitals Admitting Psychiatric Patients

Memorial Hospital, Hollywood
Ft. Lauderdale Beach Hospital, Ft. Lauderdale
Sacred Heart Hospital, Pensacola
Good Samaritan Hospital, West Palm Beach
St. Mary's Hospital, West Palm Beach

the director of the department just like the public health nurses and sanitarians do.

What do they do? The 23 workers in Florida last year were credited with 13,045 office and field (usually home) visits. They do not render psychiatric, psychological or nursing service but serve as a go-between, an arranger, a helping hand. The worker must know all the facilities and services available in the communtiy so he can help in solving problems concerned in mental health; know how to show a movie and make a speech; talk with a juvenile judge; work with teachers—but let's get down to brass tacks and take a mental health worker's average day (if there is such a thing). We'll presume he works in a medium-sized county and call him Mr. X.

★ The first thing in the morning he is met by a public health nurse on the staff who tells him that she has a patient out on the edge of town who has recently lost his wife. He has been very depressed since then and his children are worried. They want to put him in an old folks' home. He doesn't want to go. What does Mr. X suggest? After discussion, Mr. X says he will contact the family and also the patient and see if anything can be arranged to their mutual satisfaction. Incidentally, mental health workers cooperate closely with public health nurses for, naturally, these nurses do much work in the prevention of mental illness along with

Florida has 16 mental health clinics that are associated with the State Board of Health and the 67 County Health Departments. But we need more. At least 10 other cities should have such a facility where children, their parents and other adults could be helped. Such clinics would have many self-referrals, persons quite sane enough to realize something is wrong and wanting and needing help. Juvenile Court authorities, teachers, ministers, private physicians—all could use the services of such clinics.

So why don't we have more? Is it money? To some extent, but the big block is *lack of trained personnel.* The Florida Council on Mental Health Training and Research aids many professional persons to get advanced training in their specialties (psychiatry, psychology, etc.), but they cannot fill the whole need.

Another block is that many of these professional persons do not want to live in the smaller cities. They seek the professional companionship and stimulation of their colleagues and they are usually found only in Florida's big cities.

What Does I

Here are a few expressions frequently used when mental health problems are being discussed. Many of the definitions have been oversimplified for the sake of brevity.

Amnesia	Loss of memory of identity and events
Anxiety	Fear, the cause of which is unknown to the victim, or which is trivial. Fear of apparently "impending" danger, not clear and present danger
Aphasia	Inability to speak, write or understand formerly familiar phrases
Claustrophobia	Fear of closed spaces
Dementia	Serious impairment of mental faculties, loss of contact with reality, usually from organic disease
Depressive	Guilty, self-deprecating, "blue" feelings brought on by some outside influence
Dipsomania	Compulsive drinking
Epilepsy	Organic mental condition characterized by periodic unconsciousness and convulsion: "fits"
Euphoria	Sense of well-being, expansiveness, self-satisfaction
Hallucination	Sensation, such as hearing voices, not related to an outside influence
Hypnosis	Sleep or trance induced by psychological suggestion
Hypochondriac	One who is morbidly overconcerned with his state of health; one who "seems" to enjoy or be fascinated by illness
Hysteria	Gross loss of impairment of the function of one or more organs from mental, not organic, cause
Idiot	Mental defective with an I Q under 25. Adult with mental age under 3
Imbecile	Mental defective with an I Q between 25 and 50. Adult with a mental age of 3 to 7
Libido	The aggregate of forces which drive a human being
Mania	Manic phase of manic depressive behavior pattern, violent obsession
Manic Depressive	A person in great depth of despair or in the heights of euphoria; one who swings between these two extremes

Really Mean?

Melancholia	Depressed phase of the manic depressive; loosely used by laymen to mean a deeply depressed state
Mental deficiency	Underdeveloped mentality; "feeble mindedness"
Moron	Mental defective with an I Q of 50 to 70; an adult with a mental age between 7 and 12.
Mongoloid	Mentally retarded, usually with slant eyes, dry skin, usually happy and pleasant childlike personality
Neurotic	Person with a neurosis. Adj.: caused by emotional conflict
Neurosis	A group of symptoms due essentially to emotional conflict
Obsession	An absurd idea which seizes hold of a person and which he cannot rid himself of even when he sees the proof of absurdity
Paranoia	A fixed delusion, which, though false, allows the victim to reason logically
Pathologic liar	Person who lies by compulsion, even though he knows he will be found out, and the lie serves no purpose
Phobia	A morbid fear which the patient knows is groundless
Psychoanalysis	The seeking out of the source of present mental or emotional troubles by tracing the development of the personality to its childhood source.
Psychoneurosis	A set of symptoms due to emotional conflict. Same as neurosis
Psychopath	A person with a personality disorder which causes him to have trouble "getting along" with people
Psychosis	Insanity; severe mental disturbance
Psychosomatic (illness)	Caused by both emotional and physical factors
Schizophrenia	Withdrawal from reality, with delusion, bizarre behavior, hallucination; dementia
Shock therapy	Treatment by induction of convulsions

▲ A public health nurse and a mental health worker discuss a patient who has just returned home from a state mental institution.

their other work. Last year public health nurses made 14,609 office and field visits and interviews in the interest of good mental health.

★ A second public health nurse is waiting her turn. Mrs. Blank has finally come home from Chattahoochee, and wants to go back to her old job in the factory. Her employer is a little reluctant to take her back because he says Mrs. B might still be "crazy." Will Mr. X please talk to the employer and explain that a person can successfully recover from mental illness, just the same as physical illness?

★ Mr. X then hurries to a school for a meeting of the PTA Health Committee. They would like to have his help in planning a good program for their next general meeting on sex education. What films does he suggest? Any good pamphlets they might buy? Who should be the main speaker? This is a delicate subject and must be carefully approached.

★ Next to a TV station. In a program geared to housewives, Mr. X appears on a panel discussing the rise in juvenile delinquency. What can the various concerned agencies, parents, teachers do about this problem? What causes it? Most important, what can be done to help these young

people *before* they get into trouble? Youth programs, neighborhood recreation, an expanded juvenile court staff, group meetings for parents who have children who have gotten into trouble, larger staff for the child guidance clinic, all these and more are discussed.

★ Mr. X goes back to his office, dictates letters, eats his lunch and . . .

Finds a telephone message. Will he please call Mrs. Doe? He sighs and picks up the phone. Mrs. Doe answers and bursts into tears. It's the same old story. Mr. Doe has been drunk again. He won't keep his appointments at the Alcoholic Rehabilitation Clinic. He won't attend meetings of Alcoholic Anonymous. What is she to do? Mr. X. listens patiently and Mrs. Doe feels better after she has talked her problem out. They decide that Mrs. Doe should ask her minister once more to see if he can "reach" Mr. Doe.

★ Goes to a well-child conference. There are two appointments for parents who have children who are suspected of being mentally retarded. Mr. X sees both sets of parents, arranges for tests to be made of the children and promises that if they are found to need institutional care he will help them fill out the application blanks for Sunland. He warns them, however, that there is a long waiting list. The parents are given a simple pamphlet on mental retardation to read and are assured that Mr. X is interested in their problem and they may call him if they have other questions.

▲ **A mother and her new baby attend a well child clinic at the County Health Department. One of the people the mother may talk to is the mental health worker.**

▲ **A group of teachers gather with their principal to talk to the worker about some of their students' problems.**

★ Reports have come in from Chattahoochee about two patients who are coming home. Mr. X confers with a public health nurse who knows one of the patients. The other is unknown to the staff, so Mr. X asks the public health nurse who has the area where the patient's family lives to visit the home and let him know the general environment and how the family will accept him on his return.

★ By this time it is 5:00 p.m. and Mr. X goes home for dinner. At 8:00 p.m. . . .

He attends a meeting of the local Mental Health Association. Arrangements are being made for several outstanding speakers during the coming Spring and Mr. X finds himself on a committee to publicize them. The meeting breaks up at 10:00 p.m. and Mr. X goes home.

One of the state's greatest needs is for more mental health workers in *rural areas*. There are now 27 mental health workers attached to 26 county health units or departments. Dade County has two, and the multiple county units such as Citrus-Levy-Hernando, Collier-Lee, DeSoto-Charlotte-Hardee, Franklin-Gulf-Wakulla, Gadsden-Liberty, Highland-Glades-Hendry, Jackson-Calhoun, Nassau-Baker, and St. Lucie-Martin-Okeechobee have one each. This means that the citizens of 40 Florida

▲ **Here the parents of the kindergarten group and the mental health worker look at examples of the children's handiwork.**

counties have the services, at least part-time, of a mental health worker, because such workers are also on the Health Department staffs of Alachua, Brevard, Broward, Duval, Hillsborough, Indian River, Leon, Manatee, Marion, Monroe, Okaloosa, Palm Beach, Pinellas, Polk, Sarasota, Seminole and Volusia Counties. It stands to reason that the fewer other resources there are available in the community—a clinic, psychiatric ward, psychiatrist, psychologist—the greater is the need for the helpful, coordinating services of a mental health worker.

In areas where there is no mental health clinic, the mental health worker usually travels to the nearest clinic at least once a week. He frequently provides transportation for those persons who need expert attention from clinic personnel. He also discusses with the latter problems he is meeting every day and gets their professional advice. Many a person who never goes to the clinic benefits from such conferences.

▲ **The parents of a church kindergarten group hear a talk by the mental health worker on normal child growth and development.**

FLORIDA'S OUTPATIENT MENTAL HEALTH AND CHILD GUIDANCE CLINICS

Bartow

Polk County Guidance Center
490 North Hendry Street
Alan Gessner, Ph.D., Director
Minimum Age: None; Maximum Age: None

Bradenton-Sarasota

Manatee-Sarasota Mental Health Clinic, Inc.
1020 General Tinker Avenue
Bradenton-Sarasota Airport
Robert Steele, M.D., Director
Minimum Age: None; Maximum Age: None

Clearwater

Adult Mental Health Clinic
1255 Park Street
Zack Russ, M.D.
Minimum Age: None; Maximum Age: None

Daytona Beach

Volusia County Health Unit
Mental Health Division
122 North Ridgewood
D. V. Galloway, M.D., Director
Minimum Age: 3; Maximum Age: 17 (Also patients on trial visit from state mental hospitals where state eligibility requires such examination, such as to receive public assistance.)

Fort Lauderdale

Broward Mental Hygiene Clinic, Inc.
16 S. E. 13th Street
Henry J. Bessette, Ph.D., Executive Director
Minimum Age: None; Maximum Age: None

Fort Pierce

Indian River Mental Health Clinic
1002 Avenue C
N. D. Miller, M.D., Director
Minimum Age: None; Maximum Age: None

Gainesville

Alachua County Health Department
Division of Mental Health
816 S.W. 4th Avenue
Edward G. Byrne, M.D., Director
Minimum Age: None; Maximum Age: None

J. Hillis Miller Health Center
Psychiatric Outpatient Clinic
University of Florida
John D. Ainslie, M.D., Director
Minimum Age: None; Maximum Age: None

Jacksonville

Alcoholic Rehabilitation Clinic
1241 South McDuff Avenue
William J. Spann, M.D., Acting Director
Minimum Age: 18; Maximum Age: None

Duval County Child Guidance and Speech Correction Clinic
635 Ocean Street
Minimum Age: None; Maximum Age: 18

Duval Medical Center
Department of Neurology and Psychiatry
Outpatient Service
2000 Jefferson Street
Sullivan G. Bedell, M.D., Director
Serves adults primarily

Mental Health Clinic of Duval County
2000 Jefferson Street
Lindsey D. Campbell, M.D., Director
Minimum Age: 18; Maximum Age: None (Ages under 18 accepted under special circumstances)

Miami

Alcoholic Rehabilitation Clinic
1637 N.W. 10th Avenue
Louis Rogel, M.D., Director
Minimum Age: 18; Maximum Age: None

Dade County Child Guidance Clinic
1350 N.W. 14th Street
Evan Katz, M.D., Director
Minimum Age: None; Maximum Age: 17

Jackson Memorial Hospital
The Institute
Psychiatric Division
John M. Caldwell, M.D., Director
Minimum Age: None; Maximum Age: None

Orlando

Orange County Guidance Clinic
832 West Central Avenue
Edward F. Meares, M.D., Director
Minimum Age: None; Maximum Age: None

Panama City

Bay County Child Guidance Clinic
619 North MacArthur Avenue
Pauline Fertsch, Ph.D., Director
Minimum Age: None; Maximum Age: None

Pensacola

Alcoholic Rehabilitation Clinic
1107 West Avery Street
Roger Sherman, M.D., Director
Minimum Age: 18; Maximum Age: None

Escambia County Guidance Clinic
2251 North Palafox Street
Dan C. Overlade, Ph.D., Director
Minimum Age: None; Maximum Age: None

St. Petersburg

Child Guidance Clinic of Pinellas County
4032 Central Avenue
Minimum Age: None; Maximum Age: 21

Tallahassee

Leon County Health Department
Division of Mental Health
319 East Gaines Street
Kent Miller, Ph.D., Administrator
Minimum Age: None; Maximum Age: None

Tampa

Alcoholic Rehabilitation Clinic
Room 206 Professional Arts Building
420 West Lafayette Street
Arturo G. Gonzalez, M.D., Director
Minimum Age: 18; Maximum Age: None

Guidance Center of Hillsborough County
405 East Ross Avenue
Elizabeth Rockwell, M.D., Director
Minimum Age: None; Maximum Age: None

Tampa Municipal Hospital
Neuropsychiatric Clinic
Davis Island
Josephine Hall, R.N., Supervisor
Minimum Age: None; Maximum Age: None

West Palm Beach

Palm Beach County Guidance Center
419 Fifth Street
Charles Taffel, Ph.D., Director
Minimum Age: 2; Maximum Age: 18

NOTES:

Geographical areas served by clinic: While most of the clinics listed above mainly serve those people who reside in the county where the clinic is located, all mental health and child guidance clinics receiving funds from the Florida State Board of Health give some service to persons residing in surrounding counties. The Florida Alcoholic Rehabilitation Clinics also serve residents of surrounding counties. Generally, the services of clinics in county and municipal hospitals are limited to the residents of their respective political subdivisions. The out-patient clinic at the J. Hillis Miller Health Center, University of Florida, is available to people from all over the state.

FLORIDA STATE BOARD OF HEALTH

1217 Pearl Street or P. O. Box 210
JACKSONVILLE, FLORIDA

All counties in Florida have organized County Health Departments.

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